DOCUMENT RESUME

ED 027 287 SP 002 430

Behavioral Science Elementary Teacher Education Program. Final Report. Volume III.
Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.
Bureau No-BR-8-9025
Pub Date 31 Oct 68
Contract-OEC-0-8-089025-3314(010)
Note-591p.; Volume III of three volumes.
EDRS Price MF-$2.25 HC-$29.65
Descriptors-*Behavioral Sciences, Behavior Theories, Child Development, Computer Oriented Programs, Educational Philosophy, Educational Psychology, Educational Sociology, *Elementary School Teachers, Information Systems, Inservice Teacher Education, Interinstitutional Cooperation, *Models, Preservice Education, Program Administration, Staff Role, *Teacher Education Curriculum
Identifiers-Behavioral Science Teacher Education Pro, BSTEP, CAI, Comprehensive Undergraduate and Inservic

This volume completes the elementary teacher education model (see SP 002 428-29) with sections on Human Learning, Continued Professional Development, and management and information retrieval systems. In Human Learning, a model component embracing preservice and inservice education, five detailed course outlines in the areas of growth and development in the preschool child, educational psychology, and the social philsophical foundation of education are presented as syntheses of the multiple theoretical and philosophical points of view found in experts' opinions and research based studies on human learning (cognitive and affective) and the forces influencing behavior in and out of school. The section on Continued Professional Development discusses the objectives, organization, and differentiated staffing pattern of personnel (including extensive information on the Media Specialist) in a clinic-school network which operates with the theory-practice cycle. In the description of the program's administration in section 3, the interrelatedness and mutual support of the five subsystems (program development, evaluation, clinical experiences, management-planning, and information retrieval) are stressed. Section 4 develops the information storage and retrieval subsystem through all phases of the program. ED 018 677 is a related document. (LP)

BEST COPY AVAILABLE

VOL III BR-8-9025
PA-24

ED027287

MICHIGAN STATE UNIVERSITY

Final Report
Project No. 8-9025
Contract No. OEC-0-8-089025-3314 (010)

BEHAVIORAL SCIENCE ELEMENTARY TEACHER EDUCATION PROGRAM

Volume III
of Three Volumes

October 1968

SP002430

ED0 27287

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Final Report
Project No. 89025
Contract No. OEC-0-8-089025-3314 (010)

BEHAVIORAL SCIENCE ELEMENTARY TEACHER EDUCATION PROGRAM

Volume III

College of Education
College of Arts and Letters
College of Communication Arts
College of Home Economics
College of Natural Science
College of Social Science
University College

MICHIGAN STATE UNIVERSITY
East Lansing, Michigan
October 31, 1968

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

SP002430

FOREWORD

In picking up a document such as this, you may no doubt be asking yourself, "Where do I begin reading to understand this teacher education model?"The team designing the model and writing this report make these suggestions.

First,read Sections I and II before tackling any other part of the model. They were written tandem and will introduce you to the general features, outline, and rationale of the program. While the Abstract provides a briefer overview, it was not designed to project the perspective of Sections I and II.

Sections III through X are more explicit elaborations and descriptions of the various elements in the program. Readers with special interests will turn their attention to particular sections while neglecting others. A Table of Contents, following, will guide you in locating sections for further study.

In each section, an introduction provides an overview and is followed by computer print-outs of program experiences. These form the most explicit level of program description.

CONTENTS

VOLUME I

FOREWORD

TABLE OF CONTENTS

ABSTRACT

SECTION I
OVERVIEW

Introduction . . . . I - 1
  Objectives . . . . I - 2
  Special Features . . . . I - 3
  Major Areas of Program . . . . I - 8

Development of the Model. . . . . I - 12
  Problems and Limitations . . . . I - 14
  List of Definitions . . . . I - 17

Project Staff . . . . I - 24

SECTION II
RATIONALE AND PROGRAM MODEL

Rationale . . . . II - 1
  Definitions of Salient Concepts . . . . II - 2
  Propositions . . . . II - 13
  Support for the Rationale . . . . II - 17

Undergraduate Preparation Program Model . . . . II - 30
  Modular Experience Organization . . . . II - 30
  General-Liberal Education . . . . II - 33
  Scholarly Modes of Knowledge . . . . II - 37
  Professional Use of Knowledge . . . . II - 40
  Human Learning . . . . II - 43
  Clinical and Field Experience . . . . II - 45
  Teacher Specialization . . . . II - 50
  Illustrative Scope and Sequence . . . . II - 52

Continued Professional Development . . . . II - 54

Program Evaluation and Development . . . . II - 57

Management . . . . II - 59

SECTION III
CLINICAL EXPERIENCES

The Career Decision Seminar . . . . III - 2

Clinical Experiences . . . . III - 7
  Clinical Behavior Style . . . . III - 10
  Clinical Experience Sequence . . . . III - 41
  Clinical Sequence Modules . . . . III - 49

Interpersonal Process Phase . . . . III - 116
  Basic Method . . . . III - 117
  Variation Employed for Teacher Preparation . . . . . III - 128
  New Experiences . . . . III - 137
  Interpersonal Process Modules . . . . III - 144

Field Experiences . . . . III - 158
  Illustration: Training Inner City Teachers . . . . . . III - 159
  Sequencing Field Experiences . . . . III - 167
  The Clinic School . . . . III - 169
  Pre-internship Practicum . . . . III - 174
  Internship . . . . III - 177
  Field Experience Modules . . . . III - 186

SECTION IV
GENERAL -- LIBERAL EDUCATION

Introduction . . . . IV - 1

Humanities . . . . IV - 7
  I-Introduction to the Humanities . . . . IV - 14
  I-Literature . . . . IV - 34
  I-Art . . . . IV - 47
  I-Music . . . . IV - 55
  II-The Question of Value . . . . IV - 64
  II-Classics of the West-An Overview . . . . IV - 79
  II-The American Quest . . . . IV - 109
  III-The Non-West: Humanities in Sub-Saharan African Civilization . . . . . IV - 146

Social Science . . . . IV - 184
    Anthropology . . . . IV - 197
    Sociology . . . . IV - 214
    Political Systems . . . . IV - 237

Natural Science and Mathematics . . . . IV - 251
    Science . . . . IV - 251
    Mathematics . . . . IV - 270

Modes of Inquiry Seminar . . . . IV - 287

VOLUME II

FOREWORD

TABLE OF CONTENTS

SECTION V
SCHOLARLY MODES OF KNOWLEDGE

Introduction . . . . V - 1

Linguistics . . . . V - 4

Communication . . . . V - 46

Literature for Children . . . . V - 84

Fine Arts . . . . V - 136
    Art . . . . V - 138
    Dance and Drama . . . . V - 160
    Music . . . . V - 187

Social Science . . . . V - 198

Science . . . . V - 252

Mathematics . . . . V - 298

Program for Specialists . . . . V - 328

    Social Science . . . . V - 344

SECTION VI
PROFESSIONAL USE OF KNOWLEDGE

Introduction . . . . VI - 1

Reading . . . . VI - 6

Language Arts . . . . VI - 102

Social Studies . . . . VI - 143

Science . . . . VI - 192

Mathematics . . . . VI - 265

VOLUME III

FOREWORD

TABLE OF CONTENTS

SECTION VII
HUMAN LEARNING

Introduction . . . . VII - 1

Behavioral Science Research Based Study of the Growth and Development of the Pre-School Child . . . . . VII - 7
  Introduction . . . . VII - 9
  Modules . . . . VII - 52

Behavioral Science Research Based Study Focused Upon Educational Psychology . . . . VII - 75
  Introduction . . . . VII - 78
  Modules . . . . VII - 132

Behavioral Science Study Focused Upon Social Philosophical Foundation of Education . . . . VII - 202
  Introduction . . . . VII - 205
  Modules . . . . VII - 223

Advanced Behavioral Science Research Based Study Focused Upon Educational Psychology . . . . VII - 264
  Introduction . . . . VII - 266
  Modules . . . . VII - 326

Advanced Behavioral Science Study in Social-Philosophical Foundations of Education . . . . VII - 356

SECTION VIII
CONTINUED PROFESSIONAL DEVELOPMENT

Clinic School Network . . . . VIII - 2
  Network Objectives . . . . VIII - 3
  Network Organization . . . . VIII - 4
  Network Personnel . . . . VIII - 6

Resourced Teaching . . . . VIII - 8
  Core Experiences . . . . VIII - 9
  Individual Experiences . . . . VIII - 10
  Information Services . . . . VIII - 11

Educational Media Specialist . . . . VIII - 15
  Curriculum Development . . . . VIII - 20
  Learning and Discovery Program . . . . VIII - 26
  Qualifications for Entrance . . . . VIII - 60

Associate Teacher . . . . VIII - 64

SECTION IX
EVALUATION, PROGRAM DEVELOPMENT, AND MANAGEMENT

Introduction . . . . IX - 1

Management-Planning Subsystem . . . . IX - 8

Program Development Subsystem . . . . IX - 16

Information Retrieval Subsystem . . . . IX - 28

Evaluation Subsystem . . . . IX - 37

Clinical Experiences Subsystem . . . . IX - 49

Summary . . . . IX -70

SECTION X
INFORMATION STORAGE AND RETRIEVAL SYSTEM

Value Systems, Management, and Selection of Information . . . X - 1

Establishing an Information System for Experience Modules . . X - 5

Information System to Relate Student Effort to Experience Modules . . . . X - 20

Extensions of Information System . . . . X - 44

Hardware and Software Needed to Implement Main Ideas in Program . . . . X - 49

Operating the Experience Module Program on a Shoestring . . . X - 57

Irregular Symbols . . . . X - 63

SECTION VII

HUMAN LEARNING

Behavioral Science Elementary Teacher Education Program

Michigan State University

1968

SECTION VII

HUMAN LEARNING

INTRODUCTION

Although this section addresses itself to the arena of human learning as it might be defined in an undergraduate or graduate foundations of education sequence, it should be noted at the onset that we regard the outlines and teaching modules which follow as beginning and not as end states. The continual spawning of new ideas, findings, results, and speculations resulting from the happy coupling of education and behavioral science research can quickly turn today's innovations into yesterday's old ideas. With this in mind we have assembled content outlines and constructed teaching modules to reflect those research findings, points of view, and issues judged to be most current and relevant by a team of professional educators representing child development, clinical psychology, home economics, educational philosophy, cultural anthropology, elementary education, and educational psychology.

IMPLICIT ASSUMPTIONS

As in any undertaking of this kind, several philosophical and behavioral assumptions are implicit in the approach. Not all of these can be made explicit. Let us, however, in the very beginning note those assumptions which need visibility and clarification.

Those of us responsible for assembling this document began the task with a simple research based assumption, namely, that there is no one best way of learning any more than there is one best way of teaching. Rather, behavioral science research suggests that there seem to be many best ways of both learning and teaching. It depends on the teacher, the student, the subject, the grade-level, and indeed, the moment.

In addition, we were aware that different instructors operate and teach from different philosophical and theoretical points of view and that it is possible for two instructors to be equally successful (in terms of student attitude and achievement) even though they might have diametrically opposed views about the nature of human learning and behavior. It was clear to us, then, that although we might do justice to a few we would do a disservice to many if we assumed the presumptuous stance of trying to document, support, or advocate one position or point of view over another. In keeping with these assumptions, the contributors to this section attempted to synthesize and integrate research based findings and experts' opinions which reflect multiple theoretical and philosophical points of view.

This section, then, focuses on the learner and the daily cognitive-affective forces and experiences which are likely to influence his behavior both inside and outside of school. Analytic tools for studying human behavior, drawn from the behavioral sciences, furnish a cornerstone for the program and are to this section. Through more sophisticated use of these modes of inquiry, and through a better understanding of the research in this area the prospective and practicing teacher becomes a more effective teacher.

CRITERIA FOR CONTENT AND MODULE SELECTION

Obviously no single volume can include all there is to consider and know about human learning. To help us determine and select content and teaching modules which greatest flexibility and use in the development of experiences related to human learning, the following criteria served as guidelines:

1. The material must provide a basis for an understanding of all human learning.

2. The material must provide the basis for an understanding of the significant conditions, forces, or factors that stimulate, inhibit, or affect human learning in any way.

3. The material must enable us to make reasonably good predictions about the outcome of learning activity.

4. The material must be a potential source of hypotheses that can be tested in the classroom, as well as in the laboratory, in order that our understanding of the teaching-learning process may continue to develop and grow.

5. The content outlines must reflect more than a single point of view by cutting across the traditional academic discipline boundaries of behavioral science research.

THE CONTENT OUTLINES AND TEACHING MODULES

Five content outlines are included in this section. Each outline was designed and assembled so that it could serve as the framework for establishing specific components at both the undergraduate and graduate level. We regard the outlines only as starting points, as somewhere to begin, knowing full-well that they frequently will have to be modified and updated to keep pace with advances in our understanding of human learning and behavior. Content outlines, in the order in which they occur in this section are as follows:

1. Behavioral Science Research Based Study of the Growth and Development of the Pre-School Child. (Human Learning I)

2. Behavioral Science Research Based Study Focused upon Educational Psychology. (Human Learning I)

3. Behavioral Science Study Focused upon Social-Philosophical Foundations of Education. (Human Learning I)

4. Advanced Behavioral Science Research Based Study Focused upon Educational Psychology. (Human Learning II)

5. Advanced Behavioral Science Study Focused upon Social-Philosophical Foundations of Education. (Human Learning II)

Since the first three outlines deal with material typically associated with educational psychology, some overlapping of content occurs. However, we did not regard this as needless redundancy because it is quite possible for college sophomores and graduate students to study similar material, but at different levels of depth and understanding, and also with different goals in mind.

Outlines four and five appear different in form and format than the first three primarily because of the nature of the content with which they are concerned. It was quickly apparent to the Human Learning writing team that preparing content outlines for courses or experiences in social-philosophical foundations of education presented special problems. In the first place, the social-philosophical foundations area does not lend itself to ready documentation based upon empirical research conclusions. Second, this area seems to breed greater controversy and disagreement among a greater number of professional educators than is the case for educational psychology. Although controversy and disagreement within social-philosophical foundations of education circles serve as a fertile seedbed for ideas and speculations, it less frequently results in empirically substantiated conclusions. With this in mind, content outlines number four and five deal less with research based conclusions and more with issues, concerns, and problems contemporary to the American educational scene. The objective is to understand the environment in which the teacher and to translate this understanding into instructional hypotheses.

The modules which follow each of the content outlines are intended to serve as examples and illustrations of different ways to handle the content in an actual classroom setting.

These modules reflect a variety of teaching strategies ranging from suggestions for class discussions to lecture topics, to the use of audio-visual aids, to independent study guides, to field trips. In general, you can expect to find anywhere from two to four teaching modules for each major section of each outline. Again, it should be emphasized that these modules should be viewed as suggestions and not as final answers for practice.

EPILOGUE

This section, with its content outlines and modules, is designed to serve as a launching pad for the development of an undergraduate and graduate foundation of education sequence. It is concerned primarily with human learning, the personal and social conditions, circumstances, or experiences which either block or facilitate learning, and the social-cultural milieu within which all human learning takes place.

In a world of exploding population and expanding knowledge, it is clear that one of the major aims of education is to help students become more effective information processers and mediators. Our hope for this volume is that it will denote and demonstrate the conceptual and practical value of utilizing the best which behavioral science research and thinking has to offer in planning a total learning experience for prospective teachers.

The following people developed materials in the Human Learning section of the program:

Dr. Don Hamachek	Ph.D., Human Learning Coordinator Associate Professor, Educational Psychology & Child Development, Michigan State University
Dr. Vera Borasage	Ph.D., Assistant Professor, Home Management & Child Development, Michigan State University

Dr. Bernice D. Borgman	Ph.D., Professor, Home Management & Child Development, Michigan State University
Dr. James Conley	Ph.D., Assistant Professor Educational Psychology, Western Illinois University
Dr. Donald Freeman	Ph.D., Assistant Professor, Educational Psychology, Michigan State University
Dr. Iwao Ishino	Ph.D., Professor, Anthropology, Michigan State University
Dr. Norman Karl	Assistant Professor, Clinical Psychology, University of Maryland
Mr. Ron Militello	M.A., Instructor, Lincoln Park High School, Lincoln Park, Michigan
Mrs. Betty Salmi	M.A., Instructor, Educational Psychology, Michigan State University
Mr. Gerald	M.A., Instructor, Educational Psychology, Eastern Michigan University
Dr. William E. Sweetland	Ph.D., Professor, Social-Philosophical Foundations of Education, Michigan State University
Mr. Scott Vaughn	M. A., Assistant Instructor, Social-Philosophical Foundations of Education, Michigan State University

BEHAVIORAL SCIENCE RESEARCH
BASED STUDY OF THE GROWTH AND DEVELOPMENT
OF THE PRE-SCHOOL CHILD

Table of Contents

I. THEORETICAL APPROACHES TO CHILD STUDY VII-9

  A. Normative--Descriptive VII-9
  B. Developmental Task Concept VII-9
  C. The Psychoanalytic Approach VII-10
  D. The Behaviorist Approach VII-11
  E. Piaget's Developmental Theory VII-11

II. PHYSICAL DEVELOPMENT OF THE INFANT VII-12

  A. Principle of Growth VII-12
  B. Characteristics of Maturation VII-12
  C. Prenatal Development VII-13
  D. Postnatal Development VII-13

III. MOTOR DEVELOPMENT OF THE INFANT VII-15

  A. Significance in Life Span of Individual VII-15
  B. Ontogenesis is in Reflexive and in Random Mass Activity . VII-15
  C. Coordinated Patterns Develop Through Differentiation and Integration VII-16

IV. INTELLECTUAL DEVELOPMENT OF THE INFANT VII-16

  A. Relation to Motor Behavior VII-16
  B. Nature of Cognitive Development in Infancy VII-16
  C. Conditions for Learning VII-17
  D. Sensory Perception and Concept Development VII-18
  E. Language Development VII-19
  F. Memory VII-19
  G. Imitation VII-20
  H. Thinking VII-20
  I. Reasoning and Problem Solving VII-20

V. SOCIAL-EMOTIONAL DEVELOPMENT IN INFANCY VII-20

  A. Prenatal Influences on Postnatal Behavior VII-20
  B. Psychological Needs of Infants VII-20
  C. Emotional Development VII-21
  D. Social Development VII-23
  E. Personality Development VII-24

VI. PHYSICAL GROWTH OF THE PRE-SCHOOL CHILD VII-25

- A. Increase in Size VII-25
- B. Development of Body Systems VII-25

VII. MOTOR DEVELOPMENT OF THE PRE-SCHOOL CHILD VII-28

- A. Characteristics of Motor Behavior of Pre-School Children. VII-28
- B. Gross Motor Skills are Dependent upon Both Maturation and Practice VII-28
- C. Manual Skills VII-29
- D. Relation of Motor Skills to Other Facets of Development VII-30
- E. Considerations for Play Materials to Promote Motor Development VII-30

VIII. INTELLECTURAL DEVELOPMENT OF THE PRE-SCHOOL CHILD VII-30

- A. Development of Concepts VII-30
- B. The Development of Language VII-34
- C. Measurement of Intelligence VII-36
- D. Nature vs. Nurture VII-37
- E. Creativity and Intelligence VII-38

IX. EMOTIONAL-SOCIAL DEVELOPMENT OF THE PRE-SCHOOLER VII-39

- A. Emotional VII-39
- B. Social Development VII-41
- C. Personality Development VII-44

X. ROLE OF PLAY IN DEVELOPMENT DURING THE PRE-SCHOOL YEARS VII-45

- A. General Functions of Play VII-45
- B. Intellectual Development Through Play VII-45
- C. Social-Emotional Development Through Play VII-46
- D. Physical-Motor Development Through Play VII-47

XI. IMPACT OF THE FAMILY ON THE CHILD VII-47

- A. General Principles of Family Impact on Development VII-47
- B. Mediating Factors Influencing the Impact of Family VII-48
- C. Some Dimensions of Parent-Child Relationships VII-48
- D. Relevant Factors in Families with Mentally Healthy Children VII-49

XII. THE SOCIO-ECONOMICALLY DISADVANTAGED AMONG PRE-SCHOOL CHILDREN VII-50

- A. Identification of the Disadvantaged VII-50
- B. The Family Environment of the Disadvantaged VII-50
- C. Early Childhood Experiences in Depressed Areas VII-51
- D. Approaches to Learning by Pre-Schoolers VII-51

BEHAVIORAL SCIENCE RESEARCH
BASED STUDY OF THE GROWTH AND DEVELOPMENT
OF THE PRE-SCHOOL CHILD

I. THEORETICAL APPROACHES TO CHILD STUDY

A. Normative--Descriptive. (Gesell)

1. Gesell's theory is based on concept of maturation which emphasizes that interval regulatory mechanisms are responsible for all development.
2. A child goes through age stages which form characteristic "age norms" from birth to maturity.
3. Each "stage" has characteristic behavior patterns of:
   a. mental and physical organization.
   b. social and emotional behavior.
   c. activity patterns and play interests.
4. Developmental sequences are relatively invariable in all areas of growth.
5. This approach has aided philosophy that childen need experiences appropriate to their level of readiness.
6. Gesell's studies have aided the acceptance of so-called "problem behavior" as "normal behavior" if matched to age and "stage" level.
7. Gesell's studies have contributed the recognition that children vary in personality, rate of growth, and other individual abilities.
8. Limitations to the developmental approach of Gesell et al revolve around the fact that:
   a. Norms deal in averages, which may or may not be "healthy" behavior.
   b. Causes of behavior are specified mainly by age norms.
   c. The maturation view of fixed intelligence and predetermined development is questionable in light of new research.

B. Developmental Task Concept. (R. Havighurst)

1. At each stage of development there are fairly specific tasks--skills, attitudes, understandings--which society expects the individual to master at that time.
2. Developmental tasks during infancy (0-2).
3. Developmental tasks during pre-school years (2 1/2-5).
   a. Accepting a daily routine of rest and activity.
   b. Learning good habits of eating and socializing at meal time.
   c. Mastering the basics of toileting--appropriate behavior expected of culture.

d. Developing physical skills using large muscles (running, climbing, balancing) and small muscles (cutting, coloring, manipulation).

e. Becoming a participating member in the family.
   (1) Learning to give and receive affection.
   (2) Identifying with same sex parent.
   (3) Learning to share parents with family.

f. Achieving physiological stability--the biological task of homeostasis.

g. Beginning to master his impulses and learn acceptable social-emotional behavior.

h. Learning to give and receive affection.

i. Learning to communicate effectively with others through sharpening use of languages and social skills.

j. Beginning to distinguish right from wrong and to respect rules and authority.

k. Beginning to expand physical and social horizons.

C. The Psychoanalytic Approach. (Freud)

1. Freud postulated that fundamental instincts and drives were at the core of human personality.
2. These drives were part of individual at birth and were core of all human motivation.
3. Freud maintained that the success or failure of social experiences in satisfying or frustrating these drives (instincts) determined child's ability to adapt to life situations in subsequent years.
4. This theory postulates four periods of fixed stages through which each child passes in sequential order.
   a. The oral period.
      (1) The child's tension and relaxation revolve around the sucking urge.
      (2) Erikson: during this period child develops feeling of trust or distrust in people.
   b. The anal period.
      (1) The major task is bowel and bladder control with attendant stresses.
      (2) Child strives for mastery of external world; difficulties cause negativism; otherwise child begins to develop traits of orderliness, punctuality, and thrift.
   c. The "oedipal" period.
      (1) The child becomes aware of sex differences.
      (2) The child "identifies" with parent of the same sex.
   d. The latency period.
      (1) The child extends his interests and involvement to the world outside the home--school, community, and peer groups.
5. Freud's concept of "psychosexual" development revolves around the complex relationships among the three basic elements of personality--the id, the ego, and the superego.

6. Freud's contribution re: the developing child:
    a. Human behavior is often motivated at unconscious level.
    b. Various defense mechanisms (regression, projection, denial, etc.) produced by tension can be redirected to more acceptable behavior.

D. The Behaviorist Approach. (Skinner, Bijon, Baer)

1. Behavior is a consequence of stimulus events--the way a child interacts with stimulus environment.
2. Bijon and Baer formulate this as B=f(s).
3. The child's total personality is essentially the outcome of his special conditioning experiences.
4. Behaviorists see the child as a set of interrelated responses--respondent and operant--to stimuli, the external, environmental forces.
5. The child's development follows progressive changes in different ways of interacting with environment.
6. Major contributions of behaviorism to child development:
    a. stresses the need for objective, empirical data to explain and change children's behavior.
    b. stresses concepts of reinforcement contigencies, feedback, etc., to manipulate child's behavior.

E. Piaget's Developmental Theory.

1. Two components in Theory--stage-independent theory and stage-dependent theory.
    a. Stage independent theory.
        (1) Intelligence is a building of experiences in ever-increasingly complex mental structures or schemes.
        (2) Other factors influencing intellectual growth are maturation, social transmission, equilibration.
        (3) Equilibration is a continuous process of achieving equilibrium when adaptation (assimilation-accommodation process) to the stimulus is incomplete.
        (4) Assimilation is seeing stimuli in the light of familiar internal structures.
        (5) Accomodation is the process of changing ideas to fit the new situation (schema changes to adapt to assimilated reality).
    b. Stage-dependent theory.
        (1) Piaget defines several invariant chronologically successive stages of intellectual growth.
        (2) Piaget's general stages of intellectual development are:
            (a) Sensory motor stage (birth to 2 or 3 years).
                1) Child changes from an organism of inborn reflex actions to one capable of internalized thoughts.
                2) Language has begun and sensori-motor schema have been internalized.
                3) Objects are now things with multiple properties, permanence and spatial relationships to other objects.

- (b) Preoperational stage (2 years to around 7 years).
  - 1) Child begins to deal symbolically with world instead of directly through motor activity.
  - 2) Child gradually internalizes a spatial world independent of himself.
  - 3) Child's thinking is tied to the limits of his perception--properties of objects are the same even though changed in appearance (cannot "conserve" cognitive concepts like number, time, volume, length).
- (c) Stage of concrete operations (ages 8-11 or 12).
  - 1) Child can reason, although at a very concrete level.
  - 2) Child has "logical" acquisitions in being able to classify (ex. color and shape), order by series (Tuesday comes after Monday), and number.
- (d) Stage of formal operations (11 or 12 years with "adulthood" arriving 2 years later).
  - 1) Child can deal with abstract relationships.
  - 2) Child can deal with hypotheses and possible alternatives to a problem.
  - 3) Child now is oriented to reality and deals with a variety of problems.

II. PHYSICAL DEVELOPMENT OF THE INFANT

A. Principle of Growth.

1. Definition: Growth is increase in over-all size and weight from conception throughout developmental period and, to a lesser degree, throughout life; various parts and segments change in relative dimensions (Krogman; Harries).
2. Dimensions.
   - a. Rate is rapid, yet decelerating; is idiosyncratic.
   - b. Pattern is orderly in sequence; is similar for the two sexes; is idiosyncratic.
   - c. Change is modifiable particularly through diet, health and general well-being.
3. Norms.
   - a. Use--to see measurement in relation to standards.
   - b. Types.
     - (1) Average weights and heights. (Jackson and Kelly, Iowa)
     - (2) Growth curves. (Jackson-Kelly, Iowa)
     - (3) Grid technique. (Wetzel)
     - (4) Developmental age. (Olson and Huges)
     - (5) Standard-score method. (Sontag and Reynolds)

B. Characteristics of Maturation.

1. Definition--Maturation is a biological process of qualitative change which prepares the organism to function at progressively higher levels.

2. Characteristics
    a. is inseparable from growth.
    b. is coincidental to growth.
    c. is a lifelong process, evident from conception.
    d. is internal, thus obscured from direct observation.
3. Maturity indicators.
    a. Definition: An identifiable point or stage in the development of a structure or function which occupies a fixed position in a series.
    b. Types.
        (1) Radiographic study of skeletal development of hand and wrist, foot and ankle, and knee. (Pyle et al)
        (2) Ordinal sequence of eruption of teeth. (Schour and Massler)
        (3) Development of nervous system. (Conel)
        (4) Morphological development. (Sheldon)

C. Prenatal Development.

1. Embryonic development (2 weeks through 8 weeks).
    a. Development is rapid and proceeding from anterior to posterior.
    b. Various organs and tissues are being differentiated.
    c. Foundations of all fundamental organs are laid down; some organs can function.
2. Fetal development (8 weeks through 40 weeks).
    a. Differentiation (less dramatic) and integration continue.
    b. Increase in size.
    c. Organs to some degree carry on functions necessary for postnatal life.
3. Prenatal factors influencing growth.
    a. Nutrition.
    b. Sensory stimuli.
    c. Maternal emotions.
    d. Physical and chemical agents.
    e. Infections and Rh factor.
    f. Age of mother.

D. Postnatal Development.

1. Neonatal--a transition from prenatal to postnatal.
    a. Size: approximately 7 lbs., 20 in. (Meredith).
    b. Proportions: Large head, small trunk, legs shorter than arms.
    c. Physiological functioning is not stabilized.
        (1) Breathing is irregular, rapid, shallow.
        (2) Nutritive system delicately balanced.
        (3) High metabolic rate.
        (4) Body temperature unstable; heat loss is great.
        (5) No cortical function of nervous system.
2. Post-neonatal (from 1 month through 2 years).
    a. Basic processes become established.
        (1) Mechanisms of homeostasis become more efficient: temperature regulation improves, respiration slower.
        (2) Routines of eating, sleeping, eliminating become regularized.

- b. Increase in size.
  - (1) Height--by 3 months gains 1/5 of birth length; by 1 year, 1/2; by 2 years, 3/4.
  - (2) Weight--by 4 to 5 months doubles birth weight; by 1 year, triples; by 2 1/2, quadruples.
  - (3) Rate--rapid, but decelerating.
  - (4) Stability of individual's pattern increases with age. (Tanner)
  - (5) Proportions in height.
    - (a) First year trunk length and leg length increases at same rate. (Bayley and Davis)
    - (b) In second year legs grow more rapidly. (Meredith and Knott)
  - (6) Components of weight.
    - (a) Vary in proportion of total weight with age and with individuals of same age.
    - (b) Amount of water decreases with age. (Tanner)
    - (c) Subcutaneous fat increases rapidly to 9 months, decreases rapidly to 2 1/2 years. (Maresh; Tanner)
    - (d) Sex differences: boys have heavier muscles and bones; girls more fat. (Lombard et al)
- c. Development of body systems.
  - (1) Skeletal system.
    - (a) Cartilage and membranous tissue become ossified, mineralization proceeding from primary ossification centers in prenatal stage; secondary centers in postnatal stage.
    - (b) Ossification process extends from early prenatal stages to maturity.
    - (c) Immature bones have less minerals; more water, protein, blood.
    - (d) Differences in rate of development.
      - 1) Sexual--girls mature faster than boys.
      - 2) Individual differences among members of same sex.
    - (e) Skeletal status a reliable indicator of general body maturity.
    - (f) Characteristics of skeletal segments.
      - 1) Head:
        - a) Circumference 12-14 inches at birth increases 33% in first year.
        - b) Fontanelles, six at birth, become calcified during first year.
        - c) Deciduous teeth erupt six months to thirty months; permanent teeth forming in jaws.
      - 2) Thorax: Circumference at birth slightly less than head; at one year, slightly greater. Barrel-shaped.
      - 3) Vertebral column: Flexible, normal curves develop as infant achieves sitting and standing postures.
      - 4) Pelvis: Narrow and horizontal in position.
      - 5) Extremities: Arms and legs short, legs bowed, hands and feet stubby and flexible.

(2) Nervous System.
   (a) Rate--rapid in early life; attains 60% of adult weight from origin at 2 1/2 weeks prenatal to 1 year, postnatal.
   (b) Growth of parts asynchronous; cerebral areas slower in development than subcortical ones.
   (c) Subcortical centers control early infant behavior; voluntary control gradually increases from approximately six months on.

(3) Muscular system.
   (a) At birth, muscles represent 1/5-1/4 of body weight; fibers increase in length, breadth and thickness but not in number.
   (b) Direction of development is cephalocaudal; in young infant greatest development in muscles of eye, respiratory tract, in arms more than legs.
   (c) Posture characteristics: Bowed legs, knock-knees, some pronation of ankles, prominent abdomen, exaggerated lumbar curve.

(4) Endocrine system.
   (a) Endocrine glands influencing growth: pituitary, thyroid and adrenal or testes (androgen).
   (b) Action of endocrine glands highly interrelated and complex: much still unknown of their influence.

III. MOTOR DEVELOPMENT OF THE INFANT

A. Significance in Life Span of Individual.

1. Contributes to survival and autonomous life style.
2. Contributes to psychological status: perception, intelligence, emotional stability and social relationships.

B. Ontogenesis is in Reflexive and in Random Mass Activity.

1. In prenatal stage.
   a. Reflexes can be elicited. (D. Hooker)
   b. Muscular contraction results from tactual stimuli; sequences following cephalocaudal direction.
   c. Activity is both spontaneous and in response to external stimulation, increasing with fetal age and varying with time of day and degree of maternal fatigue and emotion. (Newberry; Sontag; Kellogg)
2. In neonatal stage--is suggestive of earlier fetal stages.
   a. Numerous reflexes, vital to survival and protective, are individuated and highly coordinated, specific responses. (W. Dennis)
   b. Undifferentiated mass activity released by almost any stimulus: largely organic excitants, also abrupt, intense external stimuli. (K. C. Pratt)
3. Significance: Out of undifferentiated and uncontrolled elemental movements and out of specific reflexes, will develop the voluntary coordinated motor activity of later levels of functioning.

C. Coordinated Patterns Develop Through Differentiation (Irwin) and Integration (Dennis; Gilmer).

1. Reflexes become integrated and coordinated into effective patterns (Pratt), e.g., Darwinian wanes and disappears when hand skills are beginning; Moro disappears at about 3 months; Babinski replaced by plantar 4-18 months.
2. Basic patterns developed in first 18 months lay foundations for subsequent, secondary skills.
    a. Reaching--prehensile pattern or manipulability.
        (1) Visual, as well as tactical stimuli are involved, hence, eye hand coordinations become essential. (Castner; Gesell; Kessen and Williams)
        (2) Control of eye-hand movements proceeds in orderly sequence from palmar scoop (4-5 months) to opposition of thumb and forefinger in pincer technique (12 months). (Illingworth McGraw; Gesell; Halverson; Shirley; White et al)
        (3) Significance: Increases possibilities for exploring and manipulating the environment.
    b. Locomotion.
        (1) Head and torso control are elemental locomotive movements; followed by quadrupedal and bipedal locomotion.
        (2) Locomotive development proceeds in stages in orderly sequence, and in cephalo-caudal and proximo-distal directions. (McGraw; Ames, Burnside; Griffith; Shirley; Bayley; Gesell; Irwin)
3. Secondary skills develop from 18 months on.
    a. Basic patterns are foundation for subsequent motor skills. (Gutteridge; Bayley)
    b. Maturation becomes a lesser determinant; experience a greater one-result: greater individual variation in number and kinds of skills developed.
4. Locomotive development must be assessed qualitatively as well as quantitatively.
5. Significance: Contributes to autonomy, increases visibility and frees hands for manipulative activity.

IV. INTELLECTUAL DEVELOPMENT OF THE INFANT

A. Relation to Motor Behavior.

1. Sensorimotor experience becomes associated with cognitive awareness of things and people--self and others; out of such are concepts of objects, situations and relationships formulated.
2. Sensorimotor intelligence lies at the source of thought. (Piaget)
3. Cognitive activity involves functioning of central nervous system to greater extent than does motor activity.

B. Nature of Cognitive Development in Infancy.

1. Is to come to know one's immediate environment as permanent objects and background, separate from oneself.

2. Infant is active organism acting on and responding to the environment, with far more competency than was formerly supposed. (Kessen) Functional effectiveness depends on the infant's:
   a. Temperamental nature--active type seeks and receives more stimulation.
   b. Sensitivity to fear-anxiety stimuli.
   c. Social responsiveness.
   d. Beginnings of functional independence.
   e. Aggressivity.
   f. Basic orientation to the world.
3. Rapid quantitative growth, reaching 25-30% of adult status by end of second year. (Bloom)
4. Mental development is also a qualitative change; e.g., Piaget's epigenetic theory includes six sensorimotor stages in infancy.
   a. Stage 1 (approximately birth to 1 month). Reflex behavior is assimilated to child's needs and functioning and becomes accommodated to the realities of the situation through groping trial-and-error processes.
   b. Stage 2 (approximately 2 through 5 months). Reflex processes are progressively integrated in cortical activity: variations in schema appear, reciprocal coordination among schema occurs, perceptual recognition of objects repeatedly presented takes place.
   c. Stage 3 (approximately 6 through 8 or 9 months). Actions become centered on result produced in external environment; the beginning of intentionality.
   d. Stage 4 (8 or 9 months through 11 or 12 months). Heretofore detached behavior patterns, by intention, are coordinated into a single, more complex act to attain an end. Child differentiates means from ends and self from not-self. Limitation: only familiar schemata can be utilized.
   e. Stage 5 (beginning of second year). New schemata are established through experimentation, seeking novelty for its own sake; "inventive intelligence" developing through experimenting--in-order-to-see activity.
   f. Stage 6 (latter part of second year). Awareness of relationships emerges, allowing for simple mental combinations and deductions. These are the rudiments of deductive or reflective level of intelligence. Allowing some foresight of outcomes without empirical testing; generally the child must still try things out in concrete, motor ways. "A new stage does not abolish patterns of preceding stages but new patterns are superimposed on old ones--It is still a long way from preverbal intelligence to operational thought." Piaget

C. Conditions for Learning.

1. Infant's readiness to learn--his maturation plus his previous learnings.
2. Motivation--a felt need to acquire new level of ability.

3. Optimal environmental stimulation.
    a. Infants receiving maximum stimulation most advanced in sensory and motor achievement. (Blank; Yarrow)
    b. Infants in institutions receiving minimum attention severely retarded, especially after two months of age. (Bowlby; Spitz; Dennis and Najarian; et al)

D. Sensory Perception and Concept Development.

1. Nature and significance.
    a. Sense organs are infant's "windows" to the world; learning largely dependent upon the efficiency of these organs.
    b. Most sensory areas, especially touch, taste, smell, hearing, display fairly accurate discrimination within few weeks of birth.
    c. Feedback--experience of a new perception tends to stimulate seeking further perceptual experience, thus reinforcing perceptual acts.
    d. Infants need variety of real, not vicarious, sensory experiences for clear awareness of the properties of objects and situations.
2. Intersensory perceptions.
    a. Form. Simple discrimination as early as six months; with increasing age and practice, finer form discriminations develop. Discrimination is unaffected by special orientation.
    b. Size. Errors in size perception are common in infancy. Some evidence of perception of relative size toward end of second year.
    c. Color. Evidence of awareness of presence of color by age 3-4 months. (Staples) Evidence of perceiving like hues among saturated colors emerging by two years. (Cook)
    d. Distance. Depth perception emerges when infant develops locomotion through creeping. (Gibson) By end of second year, ocular convergence enables infant to perceive size and distance.
    e. Quantity. Under 18 months recognize plural vs. singular but not actual number. Even in first year has prenumerical experience in aggregation, isolating, dispersing and separating objects.
    f. Textures. Infants explore variety of textures using lips, tongue and fingers.
3. Process of concept formation.
    a. Out of many individual perceptual experiences the common properties of an object category are abstracted.
    b. Objects can be abstracted from their context and identified.
    c. Object concepts develop earlier than class concepts but early attempts at classifying and ordering may appear in second year; e.g., sequential play with cubes, sorting and grouping.
4. Experiences for infant that stimulate his perceptual and conceptual development.
    a. Sensorimotor experiences requiring a specific response and those which permit an individual adaptive response.
    b. Experiences centered in child's interests and designed to expand his understanding of natural phenomena.

- c. Stimulation of curiosity and direction of attention.

E. Language Development.

1. Prespeech.
    - a. Crying--undifferentiated, followed by differentiated crying. Limitation--interpretation imperfect and possible only by those well acquainted with infant.
    - b. Tactual contact, muscle tension, gestures.
    - c. Non-crying vocalization.
        - (1) Reflex air emissions with no directed purpose or meaning, (approximately 1 1/2-6 months).
        - (2) Babbling (later half of first year). Infant practices at random, many phonetic elements of IPA; it is self-initiated.
        - (3) Lalling (early part of second year). Begins practice of phonemes of language of his community, the repetition of heard sounds and combinations of sounds. Chance sounds which seem to have meaning are reinforced by social responses to them.
2. Speech.
    - a. Passive vocabulary develops at faster rate than active. Comprehends some speech during later half of first year.
    - b. Near end of first year uses few meaningful words, usually monosyllable nouns and verbs imperfectly articulated.
    - c. By 18 months uses about 20 words, including some adjectives and adverbs.
    - d. Referent category is broad and inclusive; a word is over-generalized; e.g., "Da-da" may be all men or all people.
    - e. Vocalizations include non-meaningful along with meaningful words; by end of second year meaningful words dominate.
    - f. Sentence structure is over simplified: one word may convey an entire thought; sentences are telegraphic (only essential words).
    - g. Content is largely egocentric.
3. Rate of development varies widely among individuals. Some factors which aid are:
    - a. Social interaction between infant and others--talking and singing to him, playing with him, listening to his efforts to communicate.
    - b. Emotional satisfaction--he experiences generous amounts of warm and affectionate care.
    - c. Intellectual stimulation--he has materials and free access to opportunities for wide variety of sensori-motor experiences, family values language as technique to be used by child in his cognitive development.

F. Memory.

1. Evidence of immediate memory at 18-24 months; e.g., duplicate simple actions of others, repeat 1-5 single syllable words.
2. Memories of infant experiences may be retained at subconscious level.

G. Imitation.

1. Direct imitation of movements by 9 months.
2. By 15 months imitates sounds and more complex movements.
3. By 2 years begins to reflect adult mannerisms.

H. Thinking.

1. Antecedents of representation.
   a. Prevision which allows child to foresee an event connected with, or independent of, his action develops near end of sensorimotor period.
   b. Elaboration of object--sees objects in different relationships with himself, experiences environment from many perspectives, still in the realm of the concrete.
2. Invention and representation (later part of second year).
   a. Responds to new situation with sudden invention, by foreseeing mentally possible outcomes.
   b. Abstractions learned from contact with reality are manipulated, organized and transformed as mental representations of reality, hence the emergence of thinking.

I. Reasoning and Problem Solving.

1. Rudimentary problem solving done by infants--simple cause and effect association; e.g., 9-12 months recovers a cube covered by cup. 12 months pulls a desired object to within reach by means of an attached string.
2. Limitations.
   a. Short attention span limits number of sensory stimuli recorded and limits perseverance.
   b. Can associate only one or two impressions, hence limited cues limit differentiation.
   c. Tend to act out rather than think out hunches.

V. SOCIAL-EMOTIONAL DEVELOPMENT IN INFANCY

A. Prenatal Influences on Postnatal Behavior.

1. Some evidence that maternal emotional stress, accompanied by increased fetal activity, leads to irritable, hyperactive infants. (Sontag)
2. Personal-social development of Uganda infants is advanced at birth over European standards; suggests that the happy relaxed state of mother during pregnancy may be an asset to child. (Geber)
3. May be on threshold of discovering a much closer relationship between mental health of pregnant mother and that of her child in postnatal life than has been recognized.

B. Psychological Needs of Infants.

1. To feel psychological warmth, one of several parts of affection.
   a. Maternal coldness was associated with behavior difficulties in children. (Sears et al)

   - b. Social acts, aside from those involved in caring for infant, increased infants activity and vocalization. (Rheingold et al)
2. To feel a sense of security. Research shows that combination of the following influences decreased crying among infants. (Aldrich)
   - a. Infant is functioning smoothly on a physiologic plane. (Pinneau; Aldrich)
   - b. He has physical contact with mother. (Ribble; Maloney)
   - c. He experiences tactile and perceptual stimulation and sensory and motor behavior. (Casler; Hunt)
   - d. He experiences emotional interchange with mother. (Escalona; Horney)
   - e. In his personal care, mother accommodates to infants' needs; gives sensory stimulation and continuity. (Brody; Casler; Orlansky)
3. To achieve a satisfying balance of dependence-independence. Non-nurturance by adult tends to be associated with dependency behavior in young children. (Sears; Beller, Gewirtz)

C. Emotional Development.

1. Nature of emotion in infants.
   - a. Emotions are roused by tangible stimuli which impinge directly upon the senses.
   - b. Variety of stimuli which elicit emotional responses is limited.
   - c. Emotion is contagious. Strength of valence determines whether emotion dominates or is dominated; adult's mood generally dominates the child's.
   - d. Emotional states tend to be transitory.
   - e. Expression tends to be direct, physical, gross, explosive, and pervasive, involving the total organism.
   - f. Physiological maturation plays a role in emotionality during infancy but is relatively minor beyond this early period.
2. Neonatal emotionality.
   - a. Infant is born well equipped for experiencing feelings of pleasure or displeasure and displaying emotional behavior.
     - (1) Sudden intense stimuli elicit pulse and respiratory responses. (Pratt)
     - (2) Overt stimulus-response patterns are present.
   - b. Emotion is egocentric; infant responds only to external and internal stimuli which cause bodily discomfort or sensuous pleasure.
   - c. Stimuli-response patterns are largely undifferentiated states of excitement.
3. Differentiation of emotions.
   - a. According to Freudian psychosexual stages, infancy includes;
     - (1) Oral stage (approximately first year): Pleasure and security come with gratification in nursing; anxiety and insecurity with lack of gratification.
     - (2) Anal stage (second year): Locomotion and use of hands promote exploration. This and new demands of socialization, in particular toilet training, bring restrictions. New competencies bring gratification; restrictions, frustration and tension.

  b. According to Bridges, diffuse excitement becomes differentiated into specific patterns as follows:
    (1) Distress by one month; anger, disgust, fear from 4-6 months; jealousy at 15 months.
    (2) Delight by 3 months; elation, affection from 10-12 months; joy at 20 months. (Ages are approximate)
4. Fear and anxiety.
  a. Stimuli commonly arousing fear in infants include (Jersild and Holmes):
    (1) Loss of support and other unexpected movements.
    (2) Sudden, loud noises.
    (3) Strange objects, situations and persons.
      (a) Under 23 months (2) and (3) above usually are causes accounting for approximately 1/4 of fear experiences. (Jersild and Holmes)
      (b) Fear of unfamiliar persons begins about 6 months; reaches peak 12-15 months. (Franus)
    (4) Stimuli which have become associated with fearful situations; i.e., conditioning.
    (5) Fears communicated from presence of fearful or anxious persons.
  b. Coping with fears in infancy.
    (1) Presence of a trusted adult is reassuring.
    (2) Introduce infant gradually to new situations, along with reassurances.
    (3) Confidence in environment develops with infant's increasing perception of permanence of objects and exploration of environment.
    (4) Confidence in self develops with his increasing competence in motor control.
    (5) Recondition when appropriate.
5. Anger.
  a. Stimuli commonly arousing anger in infants include:
    (1) Situations involving pain, discomfort or bodily restraint (beyond mild restraint which in very young may have calming effect); e.g., when hungry, fatigued, ill, hampered in bodily movements.
    (2) In second year, interference with his choices; clashes with adult authority, especially in socialization procedures.
    (3) His own lack of skill in handling situations.
  b. Frequency of expressions of anger vary with:
    (1) Age of infant--peak is reached approximately 18 months. (Goodenough)
    (2) Well-being or health of infant. (See a, (1) above)
    (3) Family environment--calm, consistent relaxed atmosphere lessened outbursts.
    (4) Parental approaches--authoritarian methods produced more frequent outbursts of child. (Levin and Sears)
    (5) Available space--restrictions imposed by limited space increase frequency of anger expressions.
  c. Coping with anger in infants.
    (1) Set the stage to lessen occasions for anger.
    (2) Supplement child's inept efforts to handle situations.

(3) Channel child's release of energy into non-harmful activities.

(4) Permit expression but do not reinforce angry behavior by having it bring satisfaction.

6. Jealousy.

a. Usual stimulus in infancy is competition for attention and affection of parent or other significant person.

b. Expression is usually hostile attack against competitor or against person whose attention is desired.

c. Coping with jealousy--adult gives child individual attention to reassure him of adult's affection for him.

7. Joy.

a. Expressed in smiling, laughter, animated body movements.

b. Common stimuli (and age of onset) include:

(1) Human face or facsimile brought smile at about 2 months. (Spitz)

(2) Vocalizing to infant brought laughter at about 3 months. (Washburn)

(3) Infant's own gross motor activity evoked laughter at about 18 months. (Ames)

8. Love or affection.

a. Expressed in desire to be with, for contact and response from another and budding of desire to give to other person. Expressions are usually physical demonstrations of affection--first only accepted by infant, later also given by infant.

b. Forming attachments.

(1) First responses are to persons who give him physical care, affection and sociability. Up to 5 months, smiles at everybody.

(2) Approximately 6 months becomes selective, smiles only at familiar people, withdraws from strangers. (Ambrose)

(3) Attachment of mother or mother-figure emerges quite suddenly at approximately 6-7 months. (Ainsworth) Expressed in smiling and vocalizing to her, watching her, desiring to be with her, crying when she leaves. He not only responds but initiates contact with her.

(4) Gradually includes father, sibs, some relatives and friends in circle of expanding affections.

c. Effects of emotional deprivation.

(1) Quantitative deprivation of maternal care with its inadequate kinesthetic, tactile, social and affective stimulation retarded development of infants. (Goldfarb, Rheingold et al)

(2) Separation from mother after attachment had formed resulted in emotional damage. Reactions were strong protest, followed by progressive withdrawal from relationships with people. (Bowlby, Yarrow, Spitz)

D. Social Development.

1. Expressions of sociability.

a. Crying and mass activity are precursors and primitive source of later effective social communication.

- b. Smiling responses.
    - (1) Indiscriminate--2 to 6 months smiles at any human face.
    - (2) Discriminate--After approximately 6 months smiles at familiar faces, sobers in presence of strangers.
- c. Social reciprocity and initiating social contacts through various means; e.g., vocalizing, gesturing, approaching.

2. Awareness of others. (Morgan and Morgan; Buhler; Gesell)
    - a. Adults (infant has interaction more with adults than with children).
        - (1) Approximately 2 months responds to social approach with smiling, vocalizing, random body movements.
        - (2) Approximately 3-4 months discriminates between familiar persons.
        - (3) Approximately 5 months discriminates familiar from unfamiliar persons; may initiate contact with familiar persons.
        - (4) Approximately 9-12 months freely exhibits social reciprocity.
        - (5) Approximately 12 months shows definite preferences and dislikes for people.
    - b. Children.
        - (1) Approximately 3-4 months briefly notices another infant.
        - (2) Approximately 6-7 months briefly reaches toward another infant.
        - (3) Approximately 12 months may offer toy to another but not release it.
        - (4) Approximately 21-24 months plays briefly with or near another child.
3. Awareness of self.
    - a. Develops slowly in first year.
        - (1) Does not perceive clearly self as a person, different from environment; explores own body parts.
        - (2) Parents are first extension of infant's self; identifies himself with them.
    - b. Self-awareness emerges in second year; very strongly 18-24 months.
        - (1) Experiences confidence that comes with locomotion and developing manual skills.
        - (2) Explores world and sees self as focus of it.
        - (3) Is strongly attached to his possessions.

E. Personality Development.

1. Constitutional factors play significant role in uniqueness of personality and reaction to environment: placidity and irritability; activity level; tone, length and vigor of crying; toleration of frustration or discomfort; reaction to stress and overstimulation; social responsiveness; physical and morphological attributes.
2. Constitutional factors also determine in part how others react to the infant.

3. Erickson's theory of personality development (one of many) includes in infancy, development of:
    a. Sense of security or trust--develops in first year as infant has his physiological needs met in a warm affectionate manner and he is comforted and stimulated satisfactorily.
    b. Sense of autonomy--develops in second year as his developing competence in locomotion and manual skills enables him to play some part in bringing about satisfying experiences.

VI. PHYSICAL GROWTH OF THE PRE-SCHOOL CHILD

A. Increase in Size.

1. Increments in height--weight. (Watson and Lowery)
    a. At 2 years usual height is 34 inches, at 5 years, 43 inches.
    b. At 2 years usual weight is 28 pounds, at 4 years, 45 pounds.
2. Rate is decelerating.
    a. At 2 years usually added 75% of birth length, at 5 years slightly over 100%; thus in preschool years he gained approximately 1/3 as much height as in infancy.
    b. At 2 he usually is 4 times birth weight, at 5 slightly over 6 times; thus in preschool years he has gained approximately 2/3 as much as in infancy.
3. Body proportions change--all parts of body do not grow evenly.
    a. At 2 years legs constitute 34% of total height; at 5 years, 44%.
    b. At 5 years legs have tripled birth length; torso has doubled.
    c. As legs, trunk, jaw grow more than cranium, preschooler loses top-heavy appearance of infant.
4. Influences accounting for differences in rate and quality of growth.
    a. Sex--girls are maturing at more rapid rate than boys; superior size of boys in infancy becomes neglible in preschool years.
    b. Heredity factors: race, body build, individual pattern of growth is becoming more stabilized. (Tanner)
    c. Environmental factors: diet, health, living standards, emotional tone of home.
5. Components of weight.
    a. Subcutaneous fat decreases slowly through preschool years; is 1/2 as thick at 5 years as at its peak at 9 months.
    b. Boys have heavier muscles and bones; girls, more fat. (Lombard et al)
    c. Individual differences in size of bone, muscles, amount of fat.

B. Development of Body Systems.

1. Skeletal system.
    a. Characteristics.
        (1) Composition--high in cartilage and water but density increasing as ossification proceeds.
        (2) Joints flexible as ligaments and muscles more tenuously attached to bones than in older child.

(3) Easily damaged by pressure, pulling and infection due to (1) and (2) above. Illness and malnutrition may leave scars on bones. (Greulich and Pyle; et al)

b. Maturation.

(1) Sex differences--Girls maturing faster; e.g., fifth carpal bone appears in girls at 4 years; in boys at 5 years. (Pyle and Sontag)

(2) Level of development of bones in wrist and hand is indices of total skeletal development; level of total development indices of physical maturity of body.

(3) Level of development may be assessed by radiographic study of hand, wrist, foot, ankle, and knee. (Pyle et al)

c. Development of segments of skeleton.

(1) Head--By 5 years has increased 48% since birth; approximates adult size. Ratio of face to cranium is 1:3 at 6 years. (Compared with 1:8 at birth and 1:2 at 18 years) Deciduous teeth are complete and roots being reabsorbed; calcification of permanent teeth in jaw continues and will reflect disturbances in growth in preschool years. Jaws grow to accomodate teeth; if growth is inadequate or uneven result is crowding of teeth or malocclusion.

(2) Chest--Broadens, flattens, ribs change to oblique position. By age 5-6 years some approach adult shape, some still rounded. Ribs and sternum continue ossification.

(3) Vertebrae--Still highly flexible and easily mishapen but process of fixation begins and proceeds slowly.

(4) Pelvis--Increases in size, broadens and becomes less vertical. These changes in pelvis and lengthening of legs bring change in gait during third year. Consists *of two sets of three bones each, not united until* maturity.

(5) Extremities--Foot grows rapidly to about 4-5 years, followed by a period of deceleration; sexes similar in size but represents 70-75% of adult size for girls; 60-75% for boys. Arch has clearly developed its characteristic height by 5 years.

2. Nervous system.

a. Quantitative growth is decelerating: brain is 60% of its adult weight by 1 year, 75% by 3 years, 90% by 6 years; cerebellum, which gained rapidly in late infancy, is almost adult size by 5 years.

b. Qualitative growth.

(1) Information about brain growth after infancy is limited but presumably, with appropriate perceptual stimulation, there is continuous increase in number, size and complexity of connections between cells and between levels of the brain, as evidenced by child's sensori-motor and intellectual behavior.

        (2) At 5 years smaller, faster brain waves (theta) predominate as contrasted with large, slow waves (delta) of infancy. (Fois)
        (3) Increasing control over voluntary movements continues in preschool years.

3. Muscular system.
    a. Quantitative growth.
        (1) Muscles make up 1/5 to 1/4 of body weight at birth, 1/3 at adolescence.
        (2) Muscle growth follows a pattern similar to that of body as a whole but lags behind growth during childhood.
        (3) Muscle fibers grow in length, breadth, thickness but not in number.
    b. Qualitative growth and functioning.
        (1) With increasing age of child muscles change in their structure, become more firmly attached to bones, come more under control of central nervous system.
        (2) In children, arm muscles are more developed and stronger than leg muscles; e.g., in ascending stairs, raises body more by pulling with hand on banister than by lifting with leg muscles.
        (3) Large muscles are controlled to better degree than fine muscles, hence child is more skillful in gross motor skills.
        (4) Immaturity of muscles is reflected in young children's inefficiency of movement, erratic change of tempo, inability to sit still for long. They tend to tire easily but recover rapidly so need frequent, short rests and changes of activity.
        (5) Good muscle tone (muscles firm, resilient, strong, quick to react) is an indicator of good health.

4. Body dynamics.
    a. Factors involved.
        (1) Child's body must be aligned symmetrically about line passing through center of gravity.
        (2) Good muscle tone and opposing muscles in pairs of skeletal muscles being of equal strength to keep body in equilibrium.
        (3) Normal body position for preschooler's level of development is somewhat prominent abdomen and some degree of lordosis but less exaggerated than in infancy. By end of preschool years toes point straight ahead and knock-knees have become straight.
        (4) Individual differences in body structure will result in individual differences in body dynamics. There is no best posture for all children.
        (5) Environmental influences contributing to good posture include: good nutrition; balanced rest and activity; comfortable well-fitting clothing; firm, flat bed; chair to fit him; good health--both physical and emotional.

- b. Poor posture may begin in early years as result of:
  - (1) Exaggeration or perpetuation of some phase of development.
  - (2) Lack of vigor because of an organic emotional disturbance.
- c. Corrective measures can overcome poor posture.

VII. MOTOR DEVELOPMENT OF THE PRESCHOOL CHILD

A. Characteristics of Motor Behavior of Preschool Children.

1. Progress from short, simple skills of infancy to combining these into more complex skills of longer duration. Secondary skills are closely related to experience.
2. Increase in speed of performance.
3. Increase in strength.
4. Involve materials briefly for a variety of uses; e.g., children 2-5 spent 98% of play time using materials (Van Alstyne); children under 3, averaged 3-11 minutes spent with any one material. (Bott, Farwell)
5. Engage in play for its own sake; play is a repetition of newly acquired or developing skills. (McGraw)
6. Intersperse active play with quiet play.
7. Each child performs over a range of skill rather than at a consistent level.

B. Gross Motor Skills are Dependent Upon Both Maturation and Practice.

1. Walking--Improves skill and develops smooth rhythmic gait. Early preschooler must consciously adapt to clearing obstacles and to prevent bumps and falls. Later preschooler unconsciously adapts to obstacles of varying heights, unhesitatingly skirts or climbs over them.
2. Variations of walking are practiced--walking on tip-toe, standing on one foot, twirling, hopping.
3. Climbing on low inclined planks, boxes, etc. well established by 3 years. Climbing on stairs or ladders ascending by placing alternate feet on successive stairs usual by 3 1/2-4 years; descending in this manner by 4-5 years.
4. Running develops from crude uneven steps or a fast walk to a coordinated running with few falls by 5 years.
5. Jumping develops from exaggerated stepping into skill in propelling body upward and forward and landing in standing position. Less than half of 3 year olds could jump well; most 5 year olds skillful. (Gutteridge)
6. Galloping practiced by many 4 year olds; done quite well by 5. (Gutteridge)
7. Skipping (forward hopping, alternating forward foot) done by few 4 year olds but by many 5 year olds. (Gutteridge)
8. Sliding, using low slider, done by about 1/2 of 3 year olds; using any usual slide, done by 3/4 of 4 year olds and almost all 5 year olds. (Gutteridge)

9. Swinging is enjoyed but few preschoolers propel selves in swing operated vehicles.
10. Using wheel toys. Three year olds facile on tricycles; 4 year olds push and turn wagons and foot-operated vehicles.
11. Throwing. Two and 3 year olds practiced without much success; more than 3/4 of 5-5 1/2 year olds could throw ball successfully (Gutteridge) Bayley's scale indicates throwing ball overhand at 4 years old.
12. Rhythmic movement. Studies show activities keeping time to imposed sound pattern usually unsuccessful for preschoolers but they may spontaneously improvise rhythmic patterns of their own.

C. Manual Skills.

1. Handedness.
   a. Distinct hand dominance is present at early preschool age but consistent handedness isn't stablized until primary school years (7-9 years).
   b. Preferential handedness is more frequently assoicated with some activities than others; social learning influences it.
   c. Incidence of left-handedness and ambidexterity higher in boys than in girls.

(In the following skills, ages are approximate; sequence is more reliable than age, and children pass through a sequence at different rates.)

2. In self-care performance by 3 years most children:
   a. Can feed themselves without many spills.
   b. No longer use "first grip" on spoon or fork.
   c. Can take care of themselves to urinate, if clothing is easily unfastened.
   d. Wash face and hands.
   e. Undress, if clothing is easily unfastened.
   f. Need help in organizing dressing and manipulating difficult spots.
3. In use of creative materials (providing materials have been available):
   a. 2 to 3 years abilities usually include:
      (1) Scribbling with pencil and scrubbing with brush, holding crayon or brush with over-hand grasp and using arm movements.
      (2) Imitating horizontal strokes in drawing or painting.
      (3) Cutting gashes with scissors.
      (4) Stringing large beads with coarse needle.
      (5) Placing blocks in rows or piles and building simple low structures like enclosures.
      (6) Pounding nails into soft blocks.
   b. 3 to 4 year olds usually:
      (1) In drawing or painting can control lines and develop simple designs, copy a circle, mass colors.
      (2) Can move thumb independent of finger, can hold crayon or brush between forefinger and middle finger.
      (3) Build increasing complex block structures.

c. 4 to 5 year olds usually can:
  (1) In drawing, consciously form designs, copy circle, square, cross, draw recognizable human figure (as he nears 5).
  (2) Build blocks to use as part of dramatic play.
  (3) In woodworking, make simple, crude representations of objects, using 3 or 4 pieces of wood.

D. Relation of Motor Skills to Other Facets of Development.

1. He tends to use overt actions in place of or to supplement, reasoning processes to solve problems.
2. He uses gestures as substitutes or accompaniments for words.
3. Motor competence increases his self-confidence and independence. Motor competence increases social assurance with peers.
4. Motor behavior both reveals child's emotions to others and promotes healthy expression of feelings for him.
5. Development of courage is by-product of developing competence in large motor skills; learns caution without undue anxiety.
6. Motor skills of preschool years lay foundations for later competencies.

E. Considerations for Play Materials to Promote Motor Development.

1. Provide a variety of uses; usually the simple less structured is the more versatile; e.g., a large packing box can be used for climbing and jumping or a prop for variety of large motor, dramatic play activities such as a house, a book, a car, a bus, a fire engine, etc.
2. Provide child with an active, participant role in its use; mechanical toys are limited in this respect.
3. There must be ample space to use toys and freedom to use them in creative ways.

VIII. INTELLECTUAL DEVELOPMENT OF THE PRESCHOOL CHILD

A. Development of Concepts.

1. Factors influencing concept development.
   a. Conditions of the sense organs. Children tend to differ in efficiency of sensory apparatus, so no two children experience the primary data of the environment in the same way (Hurlock); e.g., the deaf child, the blind child.
   b. Intelligence.
      (1) High intelligence especially in the areas of memory and reasoning, increase child's ability to develop concepts.
      (2) Research findings indicate that intelligence plays a less crucial role in the affective element of concepts than in cognitive element; e.g., dislike of some object by child more apt to be result of prior experiences with object rather than child's knowledge of it.

c. Opportunities for learning.
   (1) Concepts are a product of learning. Research investigators indicate that the correlation between concept development and experience is greater than between concept development and intelligence.
   (2) Age plays a role in concept development. The older child is, the more learning opportunities he should have had leading to concept development.

d. Social class differences. Research indicates that a child's concepts, their accuracy, their variety, and their number and the like are to a large extent determined by social economic group affiliation, and/or rural urban environment.

e. Type of experience.
   (1) Early concept development tends to be related to definite objects, events, based on concrete experiences.
   (2) Later vicarious experiences (books, movies, television, etc.) provide many concepts.

f. Amount of guidance.
   (1) Research and clinical evidence supports idea that a child is helped to develop abstract concepts by repeated experiences with objects, people, and situations especially if verbal interaction takes place.
   (2) Encouragement by adults to observe details in environment help children to develop conceptual thinking.
   (3) Toys with careful selection help child to develop perception of space and color, etc.

g. Type of Mass Media.
   (1) Child tends to associate labels or names with concepts he develops from mass media.
   (2) *Material not appropriate to child's developmental level* can contribute to faulty concepts.

h. Research findings indicate that girls and boys, due to differential cultural conditioning, attach different meanings to experiences and objects; e.g., clothing.

i. Personality. Clinical evidence indicates that, on the whole:
   (1) a well adjusted child tends to have more accurate, more realistic, and less emotionally weighted concepts than poorly adjusted child.

j. Language.
   (1) Necessary process for concepts formation.
   (2) Sorting, labelling, classifying experiences enhanced by words.
   (3) Process of abstraction is aided by the abstraction offered by language.

2. Characteristics of children's concepts.
   a. Concepts are idiosyncratic.
      (1) Research indicates that no two children have same experiences, same intellectual ability et al; therefore, they attach different meanings to objects and situations in their environment.
      (2) Every concept is unique for every child, but it is not totally different. (Vinache)

b. Concept development follows a pattern. Research findings indicate that children's concepts change with age along a continuum: (D. Russell)

(1) from simple to complex.
(2) from concrete to abstract.
(3) from undifferentiated to differentiated.
(4) from discrete to organized.
(5) from egocentric to more social.

c. Concepts are hierarchical.

(1) In pattern of development, names are attached to objects and classes of objects from simple to complex levels.
(a) At 26 months of age--from preabstract period to first-hierarchy concepts: "Men and 'woman' are 'people'."
(b) About fourth year child enters into second-hierarchy period: "apples" are "fruit", "vegetables" are "food", etc.

d. Concepts develop from undefined to specific.

(1) Young child responds to total situation rather than any part of it; develops vague concepts.
(2) With maturity, a child uses more specific and differentiated concepts.

e. Concepts develop from specific to general.

(1) Research findings indicate that a young child's concepts are too vague for him to see relationships. He cannot put concepts into categories.
(2) With experience, child learns to group together partial elements of objects with features in common.
Example: (Woodruff)

a specific concept of RAIN + a specific concept of SNOW + a specific concept of ICE and COLD

+ a specific concept of SUNSHINE and HEAT = a general concept of WEATHER

f. Concepts are cumulative.

(1) Child builds new meanings on old when developing concepts; e.g., color, orange; fruit, orange; flower, orange blossom; etc., means finally that "orange" is more than a fruit.
(2) This process is never-ending with varied sensory and cognitive input providing enriched and broader concepts.

g. Concepts are emotionally weighted.

(1) The value a child places on concept indicated his feeling toward it and influences his behavior. (Woodruff)
(2) Values are concepts heavily weighted with emotions. (Hurlock)

h. Concepts influence behavior.

(1) Research findings indicate, for example, that a child with a favorable concept of people from minority groups will treat them more favorably.

        (2) Values, based on concepts child thinks important (i.e., popularity) will have a high effect on behavior with increasing maturity.

3. Development of reasoning ability.
    a. Research evidence indicates that preschool child is essentially prelogical in his thinking. (Piaget)
        (1) Thinking based on what has effective meaning and action possibilities for him.
        (2) Child unable to place himself in the position of the "other".
        (3) Child indulges in "centered thinking" (Piaget) in which he is dominated by immediate perceptions.
    b. Preschool child indulges in "magical" reasoning: tendency to explain things in terms of magic or mysterious forces. Another form is "animalistic thinking": Child attributes animal forces and motives to inanimate objects. This is one of the ways a child's thought processes differ from those of adults. (Piaget)
    c. Although there are qualitative differences in the thinking and reasoning of children as compared with adults, there tends to be overlapping from one age to another.
4. Preschool children's thinking on representative concepts.
    a. Time concepts.
        (1) Time is simply concrete events associated with activity.
        (2) Time and space are not differentiated.
        (3) Time is egocentric--way child feels it or wants it.
        (4) Trend of development is from egocentric time concepts (self-referred) to objective. By age 4, many children seem to have a clear understanding of sequence in daily events.
        (5) Individual differences, cultural differences and group affiliations all affect ways of structuring time.
    b. Space concepts.
        (1) Egocentric and related to perception, tied to body experience.
        (2) Given many experiences with concrete objects, interaction with people, child moves to idea that space exists independent of his perceptions (age 7, Piaget); e.g., Piaget's mountain test.
    c. Number concept.
        (1) Research based on Piaget's formulations indicate: Like time and space, number concepts are based on early concrete experiences.
        (2) Centered thinking makes child unable to weigh more than one factor at a time, to classify and seriate simultaneously. According to Piaget this ability takes place after age five and before seven years of age.
        (3) Child during preschool years can verbalize number words but will not understand the concept of number.
    d. Causality concepts.
        (1) Idea of universal impersonal laws is generally absent from preschool age thinking.
        (2) In developmental process from subjectivity to objectivity preschool child explains events in terms of "personal" activity. "The moon comes up because we need light in the night."

        (3) Preschool child is generally unable to consider a variety of factors at one time; unable to come to conclusions.

B. The Development of Language.

1. Language tasks for preschool children.
    a. Learning to express themselves clearly.
    b. Achieving comprehension.
2. The functions of language for the child.
    a. As a means to make wants and needs known.
    b. As a means to express emotion.
    c. As a device for gaining information and skill (through asking questions).
    d. As a means of initiating and motivating social interactions.
    e. As an aid in achieving a personal identity.
3. Research evidence confirms a rapid acquisition of language by the middle-class preschool child.
    a. Large increases in vocabulary, from a two year average of 272 words to a five year average of 2072. (Smith)
    b. Development of grammatical structure.
        (1) First words of most children are usually norms.
    c. The growth from egocentric thought to objectivity.
    d. Social relationships; child identifies with significant others and imitates sounds he hears.
    e. General intelligence, vocabulary being one of best single measures.
4. Research show that between ages 2-5, language growth is rapid.
    a. Child adds more clarifying words to norms--adjectives, adverbs, *et al*.
    b. Length of sentences increases which usually provide a reliable index of level of language maturity in a child. By age six, almost every complete form of sentence structure appears among those children who will ever use complex sentence structures.
    c. There are considerable individual differences *between* children and *within* a given child:
        (1) longer sentence construction in one child over another.
        (2) variation for any given child, depending on circumstances, degree of stimulation, factors of inhibition, etc.
5. Articulation--Ability to pronounce speech sounds that are clear and comprehensible to adult.
    a. Research evidence shows marked increase in accuracy of articulation between ages 2 and 3.
    b. Child's ability to correct own articulation errors tends to depend on availability of a good speech model who has a meaningful relationship to the child, usually a parent.
6. Conditions within the child that influence development of expressive language.
    a. Mental maturity; however, individual variations in rate of speech development may not correlate with mental development; e.g., A bright youngster may develop speech later than the "norms".
    b. Sensory processes, especially vision and hearing.

d. Sex.

(1) Research is quite consistent in finding sex difference in favor of girls. Girls walk at an earlier age and have larger vocabularies than boys. Boys, however, tend to understand better the meaning of words.

(2) Reasons for sex differential are less clear. Hypotheses indicate earlier maturing for girls and/or more social stimulation through speech for girls rather than boys.

e. Sibling position. Research indicates this may be environmental factor with difference related to social environment and degree of stimulation children experience in the family context.

f. Timing. Growth in expressive language usually does not occur in one smooth curve. Research indicates child will hold speech development in abeyance for a time while learning another important task during preschool years--walking, running.

7. Environmental factors in speech development.

a. Parent-child relationship.

(1) Speech patterns of "significant people" as models.

(2) Amount of speech interaction tolerated by significant adults. Preschool children ask questions!!

(3) Research indicates that quality of mother-child interaction (close relationships, verbal communication, etc.) supplies motivation for language development.

b. Impersonal settings--Research investigations have brought out fact that children tend to be retarded in language development where there is:

(1) Absence of a living mother-figure.

(2) Rearing in impersonal institutionalized settings.

c. Bilingual homes. Research indicates bilingual children as a group generally develop names for a smaller number of concepts than monolinguists.

d. Socioeconomic status of family. Research consistently shows that children from higher socioeconomic circumstances generally have a larger vocabulary, have greater facility in verbal expression, use more complex sentence structures, and develop language facility faster than do children of lower socio-economic status (especially those termed "disadvantaged". There are, however, individual variations in rate of learning and competence.

8. Development of passive (understanding) vocabulary.

a. Child understands first simple, concrete words.

b. Child understands simple action phrases before he comprehends more complex sentences.

c. Comprehension of preposition and phrases of relationship come later (Gesell: children reacted correctly to average of three prepositions at 2 years).

d. By approximately four years of age, research indicates children understand basic vocabulary of native language.

9. Development of active vocabulary.
    a. Preschool children's expressive vocabulary tends to lag behind passive vocabulary. Research evidence indicates extra dimensions needed: psycho-motor skill in expression.
    b. Active vocabulary spurts when upright locomotion is well under control.
    c. Preschool children tend to be talkative: they need exposure to larger vocabularies than their own; they need to hear words to establish meanings.
    d Verbs, adjectives, adverbs tend to be used correctly before pronouns and prepositions.
10. Summary. Research findings indicate that speech development proceeds by identifiable stages with progressive increases in
    a. comprehensibility of speech.
    b. size of vocabulary.
    c interchange of information in length of conversational unit.
    d. Completeness and complexity of sentence structures.
    e. Adult usage of parts of speech.

C. Measurement of Intelligence.

1. Intelligence testing-general
    a. Tests generally are based on differing concepts of intelligence.
        (1) Binet--ability to understand direction, maintain a mental set, correct own errors.
        (2) Terman--ability to think abstractly and use abstract symbols in solving problems.
        (3) Guilford--intelligence consists of many abilities, about two of which are known. Stresses creativity as one component
    b. Measurement of intelligence.
        (1) Most intelligence tests place premium on abstract thinking and handling of symbols.
        (2) Vocabulary appears in research as a determinant in measuring intelligence. Research findings indicate vocabulary may be best single indicator for scholastic aptitude.
    c. Concept of mental age--average performance, on standardized tests of intelligence, of children of a given chronological age.
2. Preschool age tests.
    a. Research findings resulting from studies indicate
        (1) Tests for children below 5 years of age given individually as a rule.
        (2) Tests may be both verbal and performance. Intelligence test items for young children are characterized by a factor called "persistence." This factor may be a tendency for child to respond to an established set rather than upon current stimulation. (Hofstaetter)
        (3) Preschool test scores have some predictive value by three years of age for school performance other factors being equal, a high I.Q. predicts ability to perform in the academic component.
        (4) Predicting specific intellectual and performance strengths and weaknesses is still not possible.
        (5) Accuracy of prediction for tests given in preschool years increases as age of child increases.

    (6) Random variations in I.Q. scores may be produced by socio-emotional facotrs in the testing situation: fatigue of child, inexperience of tests, etc.
    (7) Current research is concerned with conditions under which children's I.Q.s rise, fall, stay the same.
    (8) New findings indicate that an "intervention or "conpensatory" preschool educational program for disadvantaged children may result in spurts in I.Q. (Bloom)
    (9) Other current research concerns are relationships of I.Q. to personality characteristics, cognitive style, sex role, and parental practices.

D. Nature vs Nurture

1. Reviews of research studies of the 20's and 30's:
    a. The debate on what proportion of a child's mental growth rested on "nature" and "nurture" was very prevalent during the 20's and 30's.
    b. The pendulum during that time swung to the belief of predeterminism in the nature of intelligence influenced by writings of Arnold Gesell.
    c. Gesell attached great importance to "mechanism of maturation" by which a child would atuomatically go through progressions in mental development.
    d. Child development research in the 20's and 30's was predominantly concerned with normatic studies on physical growth socio-emotional patterns, development of motor skills, and language development, the latter often assessed quantitatively by the number of words spoken or understood at different age.
    e. Gesell sumarized his theory to suggest that growth potency is broadly and fundamentally determined by inheritance.
    f The nature-nurture controversy in the 20's and early 40's revolved around the effect of nursery school attendance on mental development of young children (usually indicated by increase in I.Q.).
    g. The controversy was never completely resolved, but it encouraged a great deal of research.
2. Current studies in the 60's indicate:
    a. The predeterministic concept of intelligence has been challenged with the renewed interest in
        (1) preschool education.
        (2) effect of early environment on mental development relative to the socio-economically disadvantaged preschool child.
    b. New theories of intellectual development underlie the intervention preschool programs for disadvantaged lower-class children.
    c. Piaget is a leading theorist regarding a theory of intellectual development. His main thesis is that development of the intellect, like all development, comes through interaction of the organism (with his fixed developmental potential) and his environment.
    d. Hunt is a vocal supporter of the "new interactionist" theory of mental development.

    - e. That what "goes on between the ears is much less like the static switchboard of the telephone than it is like the active information processes programmed into electronic computers to enable them to solve problems". (Hunt)
    - f. That the belief in fixed intelligence is no longer tenable. (Hunt)
    - g. That intelligence is not a fixed entity but needs stimulation from, and interaction with, the environment to flourish.
    - h. That it is the performance (which can be measured) not the native capacity (cannot be directly measured) which seems most amenable to influence by enviroumental factors.
    - i. That the total contribution of heredity is probably not far from 75 to 80 percent of mental development.
    - j. The maximal contribution of the best home environments to intelligence is apparently about 20 I.Q. points or less; conversely, the least stimulating American home environment may depress the I.Q. as much as 20 or 30 I.Q. points. (Bloom)
    - k. The old controversy of nature vs. nurture seems to be dead; a child needs adequate amounts of both interaction to function effectively. (Hunt)

E. Creativity and Intelligence

1. Difficulty of definition.
    - a. Creativity may be defined in different ways--relative to product created, the process of creating, the person of the creator, or the environment in which creation occurs.
    - b. Torrance defines creativity as "the process of sensing problems or gaps in information forming ideas or hypotheses, testing or modifying these hypotheses, and communicating results."
    - c. There is considerable amount of research on creativity but almost none carried out with nursery age children and a small amount with kindergarten age children
    - d. Creativity means inventiveness. (Getzels)
2. Research studies indicate that
    - a. creative children tend to be questioners.
    - b. creative children tend to be innovaters.
    - c. creative children tend to be flexible but non-conforming.
    - d. creative children tend to be less popular with their teachers than less denoting children.
    - e. creative imagination during early childhood seems to reach a peak between 4-4½ years of age and is followed by a drop when the child enters school for the first time (around 5). (Andrews)
    - f. there is some evidence that this is not developmental phenomenon but rather a cultural discontinuity that penalizes creative qualities of the child. (Torrance)
    - g. a difficulty for teachers seems to be the reconciliation of spontaneity, initiative, curiosity, and creativity in the classroom with maintaining discipline.
    - h. children of preschool age apparently deal inventively with their world in dramatic play and in use of materials, as well as in response to music.

IX. EMOTIONAL-SOCIAL DEVELOPMENT OF THE PRE-SCHOOLER

A. Emotional

1. Evidence of preschool years being transition between infant and school age emotionality.
    a. Young preschooler frequently evidences infantile emotional behavior.
        (1) is roused by tangible events impinging directly upon senses.
        (2) emotional states are transitory and erratic.
        (3) expression is direct, physical, gross, explosive.
    b. Older preschooler gradually is moving on toward
        (1) becoming emotionally responsive to signs and symbols.
        (2) emotional states becoming more prolonged and even.
        (3) expression becoming more subtle and indirect, cries less often.
2. Specific emotional states.
    a. Anger.
        (1) Stimuli commonly arousing anger include:
            (a) Interferences in child's activity by demands of socialization: establishing routines, regard for safety, property rights, etc.
            (b) Conflicts with authority asserting his autonomy, especially the young preschooler.
            (c) Child's own incompetencies.
            (d) Difficulties and disagreements in social situations with other children, especially true of the older preschooler.
        (2) Factors tending to increase incidences of anger.
            (a) Authoritarian attitude and approach of the adult. (Levin and Sears)
            (b) Sex of child--Boys have more than girls. (MacFarlane)
            (c) Fatigue, hunger or illness of child. (Goodenough, et.al.)
            (d) Space for child's activities is small. (Jersild)
            (e) Anger outbursts brought child what he wanted. (Goodenough)
        (3) Common modes of expression.
            (a) Young preschoolers tend to have temper tantrums; crying and explosive body activity.
            (b) In older preschoolers verbal attack begins to supplement or supplant physical attack in form of angry remarks, name calling, boasting, etc; they may exclude someone from the group; they may retaliate; they may harbor anger which finds outlets in fantasy.
        (4) Coping with anger--Child needs:
            (a) tolerant adults who accept child's feelings.
            (b) help in finding acceptable ways to release anger.
            (c) constructive suggestions and encouragement in overcoming his incompetencies.
            (d) environment which tends to lessen undue number of incidences of anger.
    b. Fear
        (1) Stimuli
            (a) Tangible stimuli (sudden noises, falling, strange people and situations) progressively decrease as sense of trust in tangible world becomes established.
            (b) Intangible stimuli (imaginary creatures, darkness, being alone, threat of danger) increase as imagination develops.

        - (c) Associated or conditional fears are present, as in infancy.
        - (d) Preschoolers, like infants, take on fears of a fearful person nearby, especially those with whom identification is strong.
    - (2) Conditions which tend to be associated with onset of fears.
        - (a) An overly demanding stressful situation for which the child was not prepared.
        - (b) Sense of trust is poorly established in the child.
        - (c) Illness, lack of physical strength, physical handicap.
        - (d) Over-protective parents.
    - (3) Expression:
        - (a) Crying decreases, verbal expression increases.
        - (b) Physical withdrawal or evasion.
        - (c) May be expressed in phantasy.
    - (4) Coping with fear. Fears reduced by:
        - (a) child learning to overcome his incompetencies.
        - (b) child increasing his understanding of the feared unknown.
        - (c) meeting the fear in the presence of a trusted adult.
        - (d) re-conditioning, when feasible.
        - (e) child being in good physical health and living within the security of a fairly regular regimen and without undue demands.

c. Anxiety.
    - (1) Defined: A widespread, generalized, unfocused fear.
    - (2) Common causes are centered around unsatisfactory parent-child relationships.
        - (a) Prolonged or complete separation from mother.
        - (b) Absence of masculine father figure for sex-role identity.
        - (c) Parental rejection.
    - (3) Expressions are varied. Common ones are:
        - (a) withdrawal from social interaction.
        - (b) undue bid for parental attention and affection.
    - (4) Coping. While moderate anxiety is universal, deep anxiety may need professional assistance in order to cope with it.

d. Jealousy.
    - (1) Common causes in young children is competition with:
        - (a) sibs for parents' love.
        - (b) parent of like-sex for love of parent of opposite sex.
    - (2) Expressions:
        - (a) Hostile acts toward competitor or toward person whose affection is desired. Acts may be
            - (1) open, direct attack, both physical and verbal.
            - (2) indirect, sometimes surreptitious acts, sometimes compensations for guilt, sometimes in phantasy.
        - (b) Undue bids for parents attention and affection.
    - (3) Coping with jealousy.
        - (a) Child is prepared for advent of new sib in family.
        - (b) Parents give each sib individual attention to assure child of parents' continuing love for him.

e. Love

(1) Factors which foster development of love in preschool child.

(a) His parents have a positive husband-wife relationship. (Baruch)

(b) Child experiences and accepts family's nurturance: They promote his well-being and like his company. (Bowlby)

(c) Parents accept child's dependency yet help him grow toward independence; are not over-protective. (Finney, Hartrup)

(2) Expressions:

(a) broadens affection beyond mother to include other family members i.e.: father, sibs, grandparents, but has preferences.

(b) no longer expects unlimited service--does some things for self.

(c) reciprocates somewhat for love received; does small things for those he loves.

(d) seeks help, proximity, physical contacts, attention and recognition of loved person, using more mature means than infant, e.g., less crying, more smiling, talking, showing accomplishments. (Beller)

f. Joy

(1) Conditions likely to precipitate joy in preschoolers:

(a) feeling of well-being.

(b) vigorous play-funning, chasing, romping.

(c) social play, especially for other preschoolers.

(d) Opportunities to be self-assertive or other ego-satisfying occasions.

(2) Expressions.

(a) smiling.

(b) Laughter, sometimes wild and boisterous.

(c) Free, spontaneous body movements.

B. Social Development.

1. Self-centeredness becomes modified by widening social horizons of three-to-four year olds.

a. Is affectionate toward people close to him.

b. Sometimes regresses, wanting to play being a baby, wanting to be both independent and dependent. (Beller)

c. At 4 is becoming aware of himself as a member of a group.

2. Development of social interchange with peers. (Parten's data)

a. Sequence of spontaneous social grouping in play.

(1) Solitary play--takes no cognizance of another's presence, most frequent in infancy.

(2) Parallel play--plays near another child but each is absorbed in his own activity. May use same materials and may imitate one another's ideas but there is no active interaction; most frequent 18-24 months.

(3) Beginning of cooperative play--separate projects but a constant recognition of one another and a free flow of conversation with sometimes temporary merging of projects; most frequent around three.

        (4) Shifting group play--loosely organized interest group grows, embracing activity of several children but depending on presence of no particular child; frequent at 3-4 years.
        (5) Organized group play--project requires cooperation of particular participants for activity to be maintained, with some taking leadership. This type is beginning at 4-5 years but is seldom complex or stable.
    b. Children having progressed to next higher sequence, do not leave earlier stages completely behind; children participate in all types at any given age with earlier stages less prominent as child matures.
3. Specific kinds of social interaction include:
    a. Aggression and quarrels.
        (1) Types of aggression: That displayed because of self-confidence; that arising from insecurity and resentment.
        (2) Influences on frequency and kind of aggression.
            (a) Models demonstrate aggression and children imitate (Bandura); e.g. physical punishment did not reduce aggression. (Sears)
            (b) In American culture, some aggressive behavior is expected, permitted and encouraged as part of independency. (Sears)
            (c) Physical factors--hunger, fatigue--induce irritability and aggression.
            (d) Increased social interaction with peers increases quarrels.
                (1) Fight their best friends more than other children. (Isaacs)
                (2) Characteristics of preschool children's quarrel (Dawe):
                    Usually initiated over struggle for possessions.
                    Frequent, brief, usually harbor little resentment.
                    Older preschoolers quarreled less frequently but more aggressively.
    b. Cooperation.
        (1) Advantages are perceived to limited degree, hence beginnings are elementary.
            (a) to take turns in use of materials.
            (b) to voluntarily share some of his possessions; being forced to do so is not true sharing.
        (2) Older preschoolers engage in cooperative projects in the beginning stages of organized play, each participant making specific contribution to the project.
        (3) Development is gradual through:
            (a) Having patterns of cooperative behavior demonstrated for him by parents, sibs, friends, teachers.
            (b) Practicing such patterns in daily living.
            (c) Experiencing himself the consideration of others for his comfort, wishes and ego.
            (d) Feeling secure within himself so he is ready to move out to help someone else.

- c. Friendship.
  - (1) Foundations for friendship and family relations are laid in early childhood through intimate living in the family.
  - (2) Factors tending to influence choice of friends among peers:
    - (a) Similar chronological age and/or developmental level. (Beaver)
    - (b) Same sex. (Helgerson; et. al.)
    - (c) Similar interests.
    - (d) Physical attractiveness. (Lippitt)
    - (e) Independence of adults. (McCandless et.al.)
  - (3) Stability or permanence of friendship.
    - (a) Tends to be transitory, of short duration.
    - (b) Some tendency for child to maintain his sociometric level in the group. (Northway and Weld)
  - (4) Child of low social potential may be satisfied if he has not been made to feel that he should be more popular. (Northway and Weld)
  - (5) Shyness and withdrawal may reflect developmental pattern or child's constitution and experience. Is helped by an "easy setting" when others are present and by freedom to proceed according to his inclination.
- d. Sympathy.
  - (1) Stages in development. (Murphy)
    - (a) Help others if convenient and the help doesn't interfere with own plans.
    - (b) Stop what one was doing to respond to another's distress.
  - (2) Expressions of sympathy, in developmental sequence. (Bridges)
    - (a) Staring or crying in sympathetic imitation.
    - (b) Trying to comfort the distressed one.
    - (c) Trying to relieve the distress by active remedies such as helping a newcomer, offering to share, defending his rights.
  - (3) Sympathetic behavior arises from different sources. (Murphy)
    - (a) To please a superior.
    - (b) Is projection of own anxiety.
    - (c) To secure sanction to fight (presumably in another's behalf.)
    - (d) Genuine warmth and friendliness for distressed one. (only the last is true sympathetic spirit).
  - (4) Great individual differences found in sympathetic behavior. (Bridges)
- e. Moral growth and character development.
  - (1) Everyday experiences compel widening of child's inclusion of others.
    - (a) Takes on simple self-care in feeding, toileting, etc.
    - (b) Does small things for others.
    - (c) Learns elementary property rights; to take turns.
    - (d) Sympathy for others is beginning.

        - (2) Differentiation of right and wrong largely in terms of family rules. Moral judgment progresses through sequences. (Piaget)
            - (a) An act which shows obedience to a rule is good; the letter of the law must be observed; results, not intentions, count.
            - (b) Sees difference between his own intentional and unintentional breaches.
            - (c) Is freed from ego-centrism in judging right and wrong intentions. This stage is very elementary, if at all, in preschool years.
        - (3) Ability to inhibit wrong acts proceeds gradually.
            - (a) Toddler pauses when told to stop.
            - (b) Young 3-year-old obeys while watched.
            - (c) 3-6 years some of the voice of society, via the family, begins to be internalized if family is warmly affectionate, firm and consistent. (Finney,Hoffman, Mussen)
- 4. Circumstances favoring development of positive peer relations.
    - a. Pleasant first experiences.
    - b. Equipment suitable for social play.
    - c. Adult understands limitations of children's social development.
    - d. Adult interprets one child's behavior to another.
    - e. Adult suggests acceptable social approaches.
    - f. Adult labels or approves acceptable social behavior. (Pylen)
    - g. Adult encourages child's skills and interests that contribute to good peer-relations. (Jack)

C. Personality Development.

- 1. Some factors which determine uniqueness are structural, i.e., qualities of the physical organism; others are behavioral (functional). All are operative in early childhood.
    - a. Morphological and physical features.
    - b. Constitutionally based attributes of temperament.
    - c. Abilities that make for effectiveness of personal functioning.
    - d. Generalized and pervasively organized behavior dispositions.
    - e. Learned patterns of social behavior and functioning.
- 2. Preschool children give evidence of perceiving their own uniqueness.
    - a. Sex role.
        - (1) 4-year-olds thought of boys as being more athletic; girls as more popular, using better social techniques. (Sidwell)
        - (2) Preschool children identified "appropriate" behavior and playthings for boys and for girls. (Conn; Rabban)
        - (3) Boys identified strongly with fathers. (Mussen and Distler)
    - b. Competency.
        - (1) Child lacking self-confidence in a situation, behaved in non-ascendant manner; acquiring necessary skills, increased confidence and ascendency. (Jack)
        - (2) Children's reactions to failure became less immature as they learned how to get better results. (Updegraff & Keister)

3. Stages of personality, according to Erickson, prominent in preschoolers.
    a. Sense of autonomy, begun in late infancy is strenghtened as child gets increasingly clearer concept of himself as a person separate from other people and things.
    b. Sense of initative urges him to try out his ideas thus enlarging concept of self by relating it to the world.
4. Research results converge on the significance of teaching and learning within the family in infancy and preschool years. There is agreement as to the importance of clarity, firmness, affection and commitment to values on the part of parents.

X. ROLE OF PLAY IN DEVELOPMENT DURING THE PRESCHOOL YEARS

A. General Functions of Play

1. Child uses play as a means of an acceptable outlet for his defeats and frustrations, especially those due to limitations of language facility. (Erikson)
2. Child uses play to drain off hostile feelings into "more manageable proportions." (Read)
3. Child uses play for its therapeutic values--relaxation of tension, relief of anxiety, outlet for primary impulses. (Slavson)
4. Child uses play for "direct, nonverbal modes of communication." (Erikson
5 Child's play is "mode of learning new patterns of thought, feeling and action, and of integrating them. (Smart and Smart)
6. Child uses imaginative play as the "purest form of egocentric and symbolic thought." (Piaget)
7. Child uses play for clarification of adult world through role playing.
8. Child uses play for enjoyment and fun. (Read)
9. Child uses play for problem-solving and experimenting with varying alternatives. (Hartley, Frank, Goldenson)
10. Play is child's "work" often hard, but child persists. (Lambert)
11. Play is arena in which all behavior patterns--social, emotional, intellectual, physical develop, often simultaneously. (Smart and Smart)

B. Intellectual Development Through Play.

1. Two forms of play are important for intellectual development. (Omwake)
    a. Self-initiated activity of child.
        (1) lacks "structure."
        (2) guided by child's imagination.
        (3) clarifies his world.
    b. Adult-prescribed activity.
        (1) modified by nature of equipment.
        (2) initiated by adult ideas and suggestions.
2. Research and documented observations have indicated that intellectual development in the preschool years is facilitated by home and/or school experiences.

a. Building imagination.
    (1) Fantasy--way in which child advances in orientation to reality.
    (2) Dramatic play.
        (a) Problem-solving.
        (b) Clarification of concepts of daily world.
        (c) Additional learning through complex games after 4 years of age; e. g. , going to the moon, complete with spaceships (blocks), astronauts (playmates) and food (sand, other "pretend" food).
        (d) Role taking as a means of identification with adults "being" mother, father, policeman, pilot through play.
        (e) Developing schemas of cognition through play with games, peg-boards, puzzles, musical instruments, etc.

b. Language experiences.
    (1) stories, humor, free play and free wheeling verbal expression.
    (2) communication with adults and children in play.
    (3) learning labelling, categorizing, building vocabulary.

c. Creative experiences with art media.
    (1) Paint, clay, paste, etc.

d. Experiences with materials.
    (1) Great variety--manipulative, experiments.
    (2) Opportunities to perceive differences and similarities leading to conceptual thinking--size, shape, color, texture, etc.

e. Variety of sensory experiences.
    (1) Using one's body in many ways.
    (2) Active involvement of senses--seeing, hearing, smelling, tasting, touching.

C. Social-Emotional Development Through Play.

1. Play is a socializing force for young children.
    a. Child's development from egocentric self-centeredness to more socialized behavior is facilitated through play.
    b. Children learn social "lessons" through play;
        (1) Adjustment to other's feelings.
        (2) respect for rights of others.
        (3) respect for physical "presence" of others.
        (4) learning to share, take turns, etc.
        (5) learning beginnings of "fair play."
        (6) learning to be sympathetic when others are hurt.
        (7) importance of communication, words to use, etc.
    c. Research shows that children learn in interpersonal situations. involving playing that:
        (1) Outgoing, friendly responses seem to be associated with more friendships and rewards than hostile responses.
        (2) Leadership and followership exact expectations of role behavior.
2. Play is an emotional release and fosters growth toward emotional "maturity."

a. Play relieves pent-up emotions of hostility, pressure, anxiety, jealousy, anger in more socially acceptable ways; e.i., angry child can pound a nail with a hammer, punch a punching bag, etc.
b. Play acts as a "safety-valve" from pressure for conformity and performance during the preschool years. (Lambert)
c. Play can add a dimension of joy and laughter.
d. Play of a "sense-pleasure" type expands child's understanding of his emotional nature.

D. Physical-Motor Development Through Play.

1. Preschool play has a large sensori-motor component. (Almy)
2. Play acts as a muscle builder through physical activity:
   a. Jumping.
   b. Running.
   c. Climbing
   d. Use of body strength in pushing, carrying, etc.
3. Play is an avenue to better motor coordination.
4. Play enhances increasing grace and skill in his movements.
   a. through use of different parts of body--arms, legs, hips.
   b. through repetition child consolidates his skills; e.g., rides a tricycle, learns; then experiments--backs up, turns around, goes fast, goes slow, etc.
5. Play enhancing physical-motor development also has psychological values. (Bakwin and Bakwin)
   a. Child is left free to explore, to experiment, to invent, discover through pleasure in physical activity.
   b. Child has satisfying experience of "impressing his own individual patterns on his environment." (Bakwin and Bakwin)
   c. Play provides practice in learning to manage body well in a variety of activities. (age-graded)
   d. Resultant competencies enhance concepts of self-worth and play important role in child's emotional growth. (Prescott)

XI. IMPACT OF THE FAMILY ON THE CHILD

A. General Principles of Family Impact on Development.

1. The parent plays the major role in satisfying child's basic needs--visceral, biological, and emotional--in the early childhood years.
2. The parent plays a major role in regulating a child's motivations and satisfactions; a parent also determines standards of acceptable behavior.
3. Early parent-child experiences benefit from the concept of primacy; parent values and specific behavior variables pre-empt the relatively unstructured childhood schemas.
4. A parent has the opportunity to influence the early "critical" periods of development before behavior patterns and direction of personality development have been set.
5. A parent plays a major role in determining personality differences in children in American pluralistic society.

B. Mediating Factors Influencing the Impact of Family.

1. The impact of parent attitudes on children is affected by:
    a. communication to children.
    b. individual differences in cognitive capacity and perceptual skill of children.
    c. individual differences in childhood temperament.
    d. developmental and/or critical period or stage of child's developmental needs; i.e.:
        (1) Gross emotional neglect and loss of succorance are most harmful during period of initial socialization (9-24 months).
        (2) Rejection and extrinsic valuation by parents are most damaging in preschool period when satellization takes place (reorganization of value systems in order to retain parents approval since they provide the child's derived status).
    e. constitutional factors; some parent attitude mav have different effects on submissive or self-assertive child.
    f. influences outside the family--peers, relatives, teachers, etc.
2. A parent is provided with a wide margin of safety in child rearing attitudes. General patterns of favorable emotional climate allows for considerable deviancy from the theoretical optimism of "normal " personality development.

C. Some Dimensions of Parent-Child Relationships.

1. Acceptance-rejection. Research findings indicate that accepted children when compared to rejected children tend to:
    a. demonstrate more highly valued personal characteristics, i.e., cooperation, honesty, friendliness.
    b. be able to concentrate and apply themselves to a task until it is done. This has particular relevancy for education.
    c. be more stable emotionally appropriate to the age level.
    d. establish satisfactory living habits, have less "nervous" habits, and have fewer problems associated with sleeping, eating and toilet training.
    e. Have better control over sex habits; interest in heterosexual relationships is more age appropriate.
2. Warmth-coldness. Research findings relevant to this dichotomy indicate that:
    a. parental warmth plays an essential role in growth and development of child.
    b. parental (especially maternal) warmth has a widespread beneficial influence with less child anxiety, passive hostility, and dependency, than cold homes.
    c. the mother's warmth and nurture strengthened the child's development of conscience.
3. Democracy vs. dictatorship.
    a. Democracy is popular philosophy, but many homes are still dictatorships.

2

b. In a democratic home:
    - (1) children are given a voice in policy making.
    - (2) children are accorded respect for increasing ability to participate in self-direction.
    - (3) children have more freedom to accept or reject parental suggestions.
    - (4) more intellectual stimulation of give-and-take interactions is provided.
    - (5) children are granted more emotional support.

c. Child behavior in a democratic home as contrasted to dictatorial homes--research indicate that:
    - (1) children tend to be accelerated intellectually, and are motivated for academic tasks.
    - (2) children tend to play dominant roles in groups, often exhibit leadership.
    - (3) children seem to be more willing to cooperate, and are more sensitive to praise and blame.
    - (4) children tend to form closer relationships with their families; relate well with adults also.

4. Permissiveness vs. restrictiveness.
    - a. Research does not support any clear-cut findings. Both dimensions have their good and bad points.
    - b. Research evidence suggests that there may be an optimum amount of control, with children suffering from too much or too little parental control.
    - c. American child rearing practices have become increasingly permissive in the last forty years, but the trend appears to be slowing down.

D. Relevant Factors in Families with Mentally Healthy Children.

1. Parents understand growth as a slow process from infancy to maturity.
2. Parents feel relatively competent to rear children.
3. Discipline is reasonable, verbal, consistent and appropriate to age level of child; more emphasis on reward rather than punishment.
4. Democratic methods in child rearing are salient with parents in relatively equalitarian roles.
5. There exists friendly interchange and companionship between parents and children with mutual respect and nonpossessive love.
6. Open and free verbal communication prevails between parent and child.
7. Warmth and intimacy typify relationships between parent and child with allowance for increasing independence of child.
8. The presence of a father in the home is an important factor for mentally healthy children.
9. Marriage of parents is happy and relatively free of conflict.
10. There exists free verbal communication about sex; sex education handled by parents appropriate to child's age level.
11. Child's aggressive tendencies understood and channeled into more acceptable outlets.
12. Parents and children encourage and invite new experiences and ideas; flexibility rather than rigidity.

XII. THE SOCIO-ECONOMICALLY DISADVANTAGED AMONG PRESCHOOL CHILDREN

A. Identification of the Disadvantaged.

1. There are overlapping groups in this category which inhabit the public schools:
    - a. The "educationally retarded," of low intelligence, poor language facility and paucity of verbal response;
    - b. The "disadvantaged," whose abilities cover a wider range, but who perform poorly under prevailing conditions at home and at school. About 15-20% of pupils in large cities are retarded and disadvantaged.
2. These children represent large ethnic groups (Negro, Mexican, Puerto Rican, Indian) as well as lower class whites.
3. These children are from families who largely come from a rural background and have migrated to larger urban centers.
4. These children usually come from large families at the lowest income levels.
5. These children are handicapped in the task of growing up to live competently in an urban, industrial, and democratic society.

B. The Family Environment of the Disadvantaged.

1. Research data on psychological and social psychological backgrounds of the disadvantaged deprived child is not always in agreement, but as more data is processed, research investigations tend to show that the family environment of the disadvantaged seemingly inhibits the mental development of the child by:
    - a. failing to provide young children with the kinds of stimulation for his senses of sight, hearing, and feeling that are likely to result in development of average intelligence.
    - b. the lack of a variety of playthings which help to expand pre-verbal intelligence.
    - c. lack of speech models and lack of verbal interaction. Adults tend to speak in monosyllables, refuse or are unable to answer questions, make few explanations about anything.
    - d. having adult models who present a restricted code of language as compared to middle class "elaborate code." (Bernstein)
    - e. lack of many sources of stimuli--family trips, family group conversations at family rituals such as meals, family games, etc.
    - f. a maternal "teaching" style characterized by discouraging of assertiveness and curiosity and encouraging a passive stance. of receiving directions, waiting to be told, and being acted upon. (Hess)
    - g. However, the usual extended family sytem of the disadvantaged provides emotional support. (Reissman)
    - h. Family patterns range from the patriarchal orientation of Latin-Americans to the largely matriachal orientation of the Negro-American family.
    - i. If any value is placed on education, lower classes usually value learning only when it has practical applications to daily living

2. Child-rearing practices
    a. Research indicates that lower class parents discipline their children differently than middle class parents by:
        (1) exercising arbitrary authority with no leeway for mediation.
        (2) making demands for action without providing explanations or instruction.
        (3) enforcing codes of behavior through physical punishment rather than verbal discipline or the psychological withdrawing of love.
    b. Children are expected to respect, obey, and defer to parents and other adults.
    c. Children expect physical punishment for disobedience; they aspire to be physically strong and enduring.
    d. Children receive no reinforcement of values inherent in education.

C. Early Childhood Experiences in Depressed Areas

1. Crowding--after initial visual and auditory inputs to facilitate development in the first year of life, as the child grows older he "tunes out" the noise and confusion caused by crowded living.
2. "Scheduling and ordering" are not part of child's world.
3. Variety and quality of experiences available to young children are limited--fewer "things," fewer (or none) reading materials, fewer (or none) trips, fewer experiences outside the immediate home environments.
4. Children have limited experiences in receiving adult approval in a task.
5. Children have few opportunities to learn through feedback (lanuage, social skills, etc.)

D. Approaches to Learning by Preschoolers.

1. Differences in learning styles. Research tends to indicate that the cognitive styles of disadvantaged children differ from middle class children. The following traits are exhibited by all children between the ages of 3-6, but the disadvantaged child persists over a longer time span in being:
    a. motoric rather than conceptually oriented.
    b. "thing-oriented" rather than idea-oriented.
    c. physically and visually inclined rather than aurally.
    d. concrete, problem-centered rather than abstract-symbolic centered.
    e. inductive rather than deductive approach to learning.
    f. "present" orientation rather than future orientation.
    h. slow, careful, patient, perseverance (if important to child) rather than quick, facile, flexible. (Reissman)

```
*OBJECTIVES    TO RECOGNIZE THE SIGNIFICANCE OF THE EMBRYONIC PERIOD IN   01310 15
               THE DEVELOPMENT OF THE CHILD.  TO UNDERSTAND SOME FACTORS  01310 16
               WHICH MAY INTERFERE WITH NORMAL EMBRYONIC DEVELOPMENT.     01310 17
*PREREQUISITE  KNOWLEDGE OF DIFFERENTIATION BETWEEN EMBRYONIC AND FETAL   01310 18
               DEVELOPMENT.  KNOWLEDGE OF VARIETY OF INFLUENCES WHICH MAY01310 19
               BEAR UPON PRENATAL DEVELOPMENT.                            01310 20
*EXPERIENCE    EXAMINE CURRENT LITERATURE FOR REPORTS OF EFFECTS ON       01310 11
               CHILDREN BORN OF MOTHERS WHO HAD USED THE DRUG,            01310 12
               THALIDOMIDE, DURING THE FIRST TRIMESTER OF PREGNANCY.      01310 13
               REPORT SUMMARY OF FINDINGS TO CLASS.                       01310 14
*SETTING       INDEPENDENT  COLLEGE                                       01310 10
*MATERIALS     CURRENT PERIODICALS IN PEDIATRICS.                         01310  5
*LEVEL         PRE-SCH.-K                                                 01310  8
*GENERAL       ALL CANDIDATES                                             01310  7
*HOURS         2                                                          01310  6
*EVALUATION    IN LIGHT OF WHAT YOU KNOW OF EMBRYONIC DEVELOPMENT,        01310 21
               EXPLAIN WHY THE EFFECT OF A CHEMICAL AGENT SUCH AS         01310 22
               THALIDAMIDE IS PARTICULARLY DAMAGING TO CHILD IF USED BY   01310 23
               MOTHER DURING FIRST TRIMESTER OF PREGNANCY.                01310 24
*FILE          INFANCY  DRUGS  PREGNANCY                                  01310  9
```

```
*OBJECTIVES    TO DEMONSTRATE THE PRINCIPLES OF DECELERATING RATE OF      01311 18
               GROWTH AND INDIVIDUAL DIFFERENCES IN RATE OF GROWTH.       01311 19
*PREREQUISITE  KNOWLEDGE OF THE TWO PRINCIPLES OF GROWTH STATED ABOVE AND01311 20
               OF THE NATURE AND USE OF THE IOWA GROWTH CURVES.           01311 21
*EXPERIENCE    FROM HEIGHT AND WEIGHT DATA OF TWO INFANTS DURING THEIR    01311 11
               FIRST TWO YEARS, PLOT EACH CHILD$S GROWTH ON THE IOWA      01311 12
               GROWTH CURVES,  EXAMINE RESULTS FOR RATE OF GROWTH OVER    01311 13
               THE TWO-YEAR PERIOD AND DEVIATIONS FROM NORMAL EXPECTANCY.01311 14
               THIS COULD BE DONE AS A DEMONSTRATION BY INSTRUCTOR TO A   01311 15
               GROUP OF STUDENTS OR COULD BE DONE BY STUDENTS ON          01311 16
               INDIVIDUAL BASIS, FOLLOWED BY GROUP DISCUSSION.            01311 17
*SETTING       LARGE GROUP  INDEPENDENT  COLLEGE                          01311 10
*MATERIALS     HEIGHT-WEIGHT DATA ON TWO INFANTS AT INTERVALS DURING      01311  5
               FIRST TWO YEARS AND IOWA GROWTH CURVES.                    01311
*LEVEL         PRE-SCH.-K                                                 01311  8
*GENERAL       ALL CANDIDATES                                             01311  7
*HOURS         1                                                          01311  6
*EVALUATION    SUMMARIZE FROM THE PLOTTED CURVES, WIDENESS OF             01311 22
               DECELERATING RATE OF GROWTH AND INDIVIDUAL DIFFERENCES IN  01311 23
               RATE OF GROWTH.                                            01311 24
*FILE          INFANCY  IOWA GROWTH CURVES  INDIVIDUAL DIFFERENCES        01311  9
```

```
*OBJECTIVES    TO ILLUSTRATE DEGREE OF OSSIFICATION EXPECTED IN INFANCY+  01312 21
               INDIVIDUAL DIFFERENCES IN RATE OF OSSIFICATION+ SEXUAL     01312 22
               DIFFERENCES IN RATE OF OSSIFICATION.                       01312 23
*PREREQUISITE  KNOWLEDGE OF COMPOSITION OF IMMATURE BONES.  KNOWLEDGE     01312 24
               THAT DEVELOPMENT OF BONES IN HAND AND WRIST ARE GOOD       01312 25
               INDICES OF OVER-ALL SKELETAL DEVELOPMENT OF THE            01312 26
               INDIVIDUAL.                                                01312 27
*EXPERIENCE    TO BE PRESENTED BY INSTRUCTOR TO CLASS.  EXAMINE 4 SETS OF01312 11
               X-RAYS OF BONES OF HAND AND WRIST AS FOLLOWS:  1.  NORM    01312 12
               FOR BOYS AT BIRTH+ AT 1 YR.+ AT 2 YR.  2.  NORM FOR GIRLS  01312 13
               AT BIRTH+ AT 1 YR.+ AT 2 YR.  3.  OF AN INDIVIDUAL BOY AT  01312 14
               BIRTH+ AT 1 YR.+ AT 2 YR.  4.  OF AN INDIVIDUAL GIRL AT    01312 15
               BIRTH+ AT 1 YR.+ AT 2 YR.  NOTE AMOUNT OF OSSIFICATION AT  01312 16
               EACH AGE IN EACH SET.  TRACE AMOUNT OF OSSIFICATION        01312 17
               BETWEEN BIRTH AND 2 YR. FOR EACH CHILD.  COMPARE AMOUNT OF01312 18
               OSSIFICATION FOR EACH CHILD AT EACH AGE WITH NORMATIVE     01312 19
               EXPECTANCY FOR HIS AGE AND SEX.                            01312 20
*SETTING       LARGE GROUP  COLLEGE                                       01312 10
*MATERIALS     4 SETS OF X-RAYS AS INDICATED ABOVE.  APPROPRIATE LIGHTING01312  5
               TO DISPLAY X-RAYS.                                         01312
*LEVEL         PRE-SCH.-K                                                 01312  8
```

```
*GENERAL       ALL CANDIDATES                                        01312  7
*HOURS         1                                                     01312  6
*EVALUATION    SUMMARIZE WIDENESS 3F DEGREE OF OSSIFICATION DURING   01312 28
               INFANCY FOR BOYS+ FOR GIRLS.                          01312 29
*FILE          INFANCY  BONES  NORMATIVE DATA                        01312  9
```

```
*OBJECTIVES    TO OBSERVE PROGRESS DURING INFANCY OF THE DEVELOPMENT OF  01313 24
               MOTOR CONTROL IN MANUAL COMPETENCY+ TO RELATE THIS TO     01313 25
               DEVELOPMENT OF NERVOUS SYSTEM AND TO COGNITIVE            01313 26
               DEVELOPMENT,                                              01313 27
*PREREQUISITE KNOWLEDGE OF REACHING-PREHENSILE-MANIPULATION PATTERNS AS  01313 28
               DESCRIBED IN THE LITERATURE E.G. MCGRAW, M. B.+ WHITE,    01313 29
               B, L.+ OR GESELL, A.  KNOWLEDGE OF SUB-CORTICAL AND       01313 30
               CORTICAL DEVELOPMENT OF THE NERVOUS SYSTEM.               01313 31
*EXPERIENCE    OBSERVE REACHING+PREHENSILE-MANIPULATION PATTERNS OF SIX  01313 11
               INFANTS RANGING IN AGE ≥AT 2 MO. INTERVALS↑ FROM 2-12 MO.,01313 12
               OBSERVING EACH INFANT FOR A 7-MIN. INTERVAL.  UNDER       01313 13
               GUIDANCE OF INSTRUCTOR, A TEAM OF FOUR STUDENTS WILL WORK 01313 14
               WITH EACH INFANT WHILE REMAINDER OF CLASS OBSERVES.  TASKS01313 15
               OF TEAM MEMBERS WILL BE:  1.  PRESENT STIMULUS OBJECTS FOR01313 16
               INFANT TO GRASP AND ENTICE HIM TO GRASP.  2.  RECORD      01313 17
               EYE-HAND COORDINATION: EYE AND HEAD MOVEMENTS, MOVEMENTS  01313 18
               OF ARMS AND TORSO IN REACHING ATTEMPT.  3.  RECORD        01313 19

               GRASPING AND MANIPULATIVE MOVEMENTS OF FINGERS AND HANDS. 01313 20
               4,  RECORD RANDOM MOTOR ACTIVITIES OF THE INFANT.  EACH   01313 21
               TEAM WILL SUMMARIZE THEIR OBSERVATION DATA AND REPORT TO  01313 22
               THE CLASS,                                                01313 23
*SETTING       SMALL GROUP ≥24 STUDENTS↑  COLLEGE                        01313 10
*MATERIALS     6 INFANTS, AS DESIGNATED ABOVE+ ATTRACTIVE, APPROPRIATE   01313  5
               STIMULUS OBJECTS FOR INFANTS TO GROUP.  DESIRED: CAMERA   01313
               FOR VIDEO TAPING EACH TEAM HAS RESOURCE MATERAIL FOR LATER01313
               USE.                                                      01313
*LEVEL         PRE-SCH,-K                                                01313  8
*GENERAL       ALL CANDIDATES                                            01313  7
*HOURS         2                                                         01313  6
*EVALUATION    TRACE MOTOR CONTROL IN REACHING-PREHENSILE-MANIPULATION   01313 32
               PATTERNS ON 1ST YEARS.  RELATE THIS TO DEVELOPMENT OF THE 01313 33
               NERVOUS SYSTEM.  HOW DOES THIS INCREASE CHILD≤S POTENTIAL 01313 34
               FOR COGNITIVE DEVELOPMENT.                                01313 35
*FILE          INFANCY  OBSERVATION  MOTOR DEVELOPMENT                   01313  9
```

```
*OBJECTIVES    TO SEE THE CEPHALOCAUDAL DIRECTION OF BODY CONTROL IN     01314 20
               INFANCY,  TO REALIZE THE QUALITATIVE GROWTH IN WALKING    01314 21
               FROM AN EARLY TO A LATER STAGE.                           01314 22
*PREREQUISITE SOME COMPETENCY IN OBSERVING AND RECORDING OBSERVATION     01314 23
               DATE.                                                     01314 24
*EXPERIENCE    ON FILM OR LIVE, OBSERVE SIX CHILDREN IN SEQUENTIAL STAGES01314 11
               OF ATTAINING UPRIGHT POSTURE AND LOCOMOTION, APPROXIMATELY01314 12
               THESE AGES:  1-2 MO. ≥RUDIMENTARY CONTROL OF HEAD AND     01314 13
               NECK↑+ 4-5 MO. ≥CONTROL OF HEAD, NECK AND UPPER TORSO↑+   01314 14
               6-7 MO. ≥CONTROL OF LOWER TORSO, SITTING↑+ 8-10 MO.       01314 15
               ≥QUADRUPEDAL LOCOMOTION, TEMPORARY UPRIGHT POSTURE↑+      01314 16
               12-15 MO. ≥BIPEDAL LOCOMOTION↑+ 36 MO. ≥SMOOTH, RHYTHMIC  01314 17
               GAIT↑,  OBSERVE EACH FOR 7 MIN.  RECORD BODY MOVEMENTS    01314 18
               WHICH GIVE EVIDENCE OF PROGRESS BODY CONTROL AT EACH AGE. 01314 19
*SETTING       LARGE GROUP ≥IF FILM↑  SMALL GROUP ≥1-12 STUDENTS↑ ≥IF    01314 10
               LIVE↑  COLLEGE                                            01314
*MATERIALS     FILM OR SIX CHILDREN AS DESIGNATED                        01314  5
*LEVEL         PRE-SCH,-K                                                01314  8
*GENERAL       ALL CANDIDATES                                            01314  7
*HOURS         2                                                         01314  6
*EVALUATION    TRACE THE CEPHALOCAUDAL DIRECTION OF BODY CONTROL DURING  01314 25
               THE 1ST YEAR.  COMPARE SKILL OF WALKING OF THE TODDLER AND01314 26
               3 YEAR OLD.                                               01314 27
*FILE          INFANCY  LOCOMOTION  BODY CONTROL                         01314  9
```

```
*OBJECTIVES    TO INCREASE UNDERSTANDING OF THE PIAGET THEORY THROUGH      01315 16
               OBSERVING IT BEING OPERATIONALIZED.                         01315 17
*PREREQUISITE  KNOWLEDGE OF THE STAGES IN THE SENSORIMOTOR PERIODS, IN     01315 18
               THEIR THEORITICAL PHRASEOLOGY                               01315 19
*EXPERIENCE    OBSERVE ON SERIES OF FILMS.  INFANTS OF VARIOUS AGES,       01315 11
               DEMONSTRATING THE SIX SENSORIMOTOR STAGES OF PIAGET≤S       01315 12
               EPIGENTIC THEORY OF COGNITIVE DEVELOPMENT.  RECORD          01315 13
               EVIDENCES, AS REVEALED IN CHILDREN≤S OVERT BEHAVIOR, OF     01315 14
               CHILDREN FUNCTIONING AT EACH OF THE SIX STAGES.             01315 15
*SETTING       LARGE GROUP  COLLEGE                                        01315 10
*MATERIALS     FILMS:  SERIES OF SIX FILMS ENTITLED ORDINAL SCALES OF      01315  5
               INFANT PSYCHOLOGICAL BEHAVIOR BY J. M. V. HUNT,  UN. OF     01315
               ILL.   AV. SHOWING TIME 30 - 35 MIN. PER FILM               01315
*LEVEL         PRE-SCH.-K                                                  01315  8
*GENERAL       ALL CANDIDATES                                              01315  7
*HOURS         1 ≥FOR EACH FILM USED+                                      01315  6
*EVALUATION    IDENTIFY IN THE SPONTANEOUS SENSORIMOTOR ACTIVITIES OF AN   01315 20
               INFANT ≥ON FILM IN LIVE+ EVIDENCES OF ONE OR MORE OF THE    01315 21
               SIX STAGES.  EACH STUDENT WOULD DO THIS EVALUATION          01315 22
               INDEPENDENTLY WHETHER SEEING A FILM AS A GROUP OR SEEING    01315 23
               AN INFANT INDIVIDUALLY.                                     01315 24
*FILE          INFANCY  PIAGET≤S MOTOR STAGES  COGNITIVE DEVELOPMENT       01315  9
```

```
*OBJECTIVES    TO BECOME AWARE OF INFANT≤S NEED FOR FIRST-HAND SENSORY     01316 15
               EXPERIENCES FOR CLEAR AWARENESS OF PROPERTIES OF OBJECTS    01316 16
               AND SITUATIONS.  TO BE ABLE TO PLAN WAYS TO PROVIDE         01316 17
               INFANTS WITH SUCH EXPERIENCES.                              01316 18
*PREREQUISITE  BLANK                                                       01316 19
*EXPERIENCE    COMPILE A LIST OF SENSORY EXPERIENCES FOR INFANTS,          01316 11
               DESIGNATING THE APPROXIMATE AGE FOR WHICH EACH EXPERIENCE   01316 12
               WOULD BE APPROPRIATE.  PROCURE SAMPLES OF SOME SIMPLE       01316 13
               MATERIALS WHICH MIGHT BE USED TO GIVE SENSORY EXPERIENCES.  01316 14
*SETTING       INDEPENDENT  COLLEGE                                        01316 10
*MATERIALS     BLANK                                                       01316  5
*LEVEL         PRE-SCH.-K                                                  01316  8
*GENERAL       ALL CANDIDATES                                              01316  7
*HOURS         1 1/2                                                       01316  6
*EVALUATION    PRESENT SOME MATERIALS TO AN INFANT AND NOTE HIS            01316 20
               SENSORIMOTOR RESPONSES TO THEM.  IN YOUR JUDGMENT, WHAT     01316 21
               MIGHT THIS EXPERIENCE BE CONTRIBUTING TO THE CHILD≤S        01316 22
               COGNITIVE DEVELOPMENT.                                      01316 23
*FILE          INFANCY  SENSORY DEVELOPMENT  MATERIALS                     01316  9
```

```
*OBJECTIVES    TO RECOGNIZE PREVERBAL INTERSENSORY PERCEPTUAL DEVELOPMENT01317 17
               IN INFANT AS IT IS PROMOTED THROUGH CHILD≤S SPONTANEOUS     01317 18
               PLAY ACTIVITY.                                              01317 19
*PREREQUISITE  SEE EXPERIENCE IN MODULE, P. 8                              01317 20
*EXPERIENCE    OBSERVE AN INFANT ≥12-18 MO.+, LIVE ≥OR ON FILM+, IN        01317 11
               SPONTANEOUS PLAY, USING PLAY MATERIALS WHICH WOULD PROVIDE01317 12
               A VARIETY OF SENSORY EXPERIENCES.  FROM HIS OVERT BEHAVIOR,01317 13
               RECORD EVIDENCE OF HIS PERCEPTION ≥OR LACK OF PERCEPTION+ 01317 14
               OF AS MANY OF THE FOLLOWING AS YOU CHANCE TO OBSERVE:       01317 15
               SHAPE OR FORM, SIZE, COLOR, DISTANCE, QUANTITY, TEXTURE.    01317 16
*SETTING       LARGE GROUP ≥IF FILM+  INDEPENDENT ≥IF LIVE+  SMALL GROUP   01317 10
               ≥1-12 STUDENTS+ ≥IF LIVE+  COLLEGE                          01317
*MATERIALS     INFANT 12-18 MO.+ PLAY MATERIALS SUCH AS COLORED CUBES,     01317  5
               SIMPLE FORM BOARD, BALL, MATERIALS OF SMOOTH AND ROUGH      01317
               SURFACES, NEST OF BOXES OF GRADUATED SIZES, ETC.  OR FILM   01317
               SHOWING ABOVE SITUATION.                                    01317
*LEVEL         PRE-SCH.-K                                                  01317  8
*GENERAL       ALL CANDIDATES                                              01317  7
*HOURS         1 1/2                                                       01317  6
*EVALUATION    SUMMARIZE OBSERVATION DATA TO INDICATE LEVEL OF CHILD≤S     01317 21
               PERCEPTION IN EACH OF THE TYPES OBSERVED.                   01317 22
*FILE          INFANCY  PLAY  PERCEPTUAL DEVELOPMENT                       01317  9
```

```
*OBJECTIVES     1, TO RECOGNIZE IN NON-CRYING VOCALIZATIONS OF INFANTS     01318 19
                DURING PRESPEECH PERIOD SOUNDS WHICH ARE BUILDING BLOCKS  01318 20
                OF LATER SPEECH.  2. TO BECOME AWARE OF THE ADULT         01318 21
                INTERACTION WITH CHILD AS A STIMULUS TO THE CHILD≤S       01318 22
                VOCALIZATION.                                             01318 23
*PREREQUISITE 1, KNOWLEDGE OF THE STAGES OF PRESPEECH VOCALIZATION.       01318 24
                2, SOME SKILL IN RECORDING PHONETICALLY SOUNDS HEARD.     01318 25
*EXPERIENCE     LISTEN TO TAPE RECORDINGS ≥PREFERABLY VIDEO-TAPE↑ OF      01318 11
                NON-CRYING VOCALIZATIONS OF INFANTS IN THREE STAGES OF    01318 12
                PRESPEECH VOCALIZATION:  REFLEX AIR EMISSIONS ≥APPROX.    01318 13
                1 1/2 - 5 MO.↑↓ BABBLING ≥APPROX. 6-12 MO↑↓ LALLING       01318 14
                ≥APPROX. 12-18 MO.↑.  AT EACH AGE WILL BE PRESENTED       01318 15
                INFANT≤S VOCALIZATIONS WHEN CHILD IS ALONE ≥5 MIN.↑ AND   01318 16
                WHEN MOTHER IS INTERACTING WITH CHILD ≥5 MIN.↑.  RECORD   01318 17
                THE SOUNDS THE CHILD MAKES IN EACH OF THE SIX INTERVALS.  01318 18
*SETTING        LARGE GROUP  INDEPENDENT  SMALL GROUP ≥1-12 STUDENTS↑  ANY01318 10
                ONE  COLLEGE                                              01318
*MATERIALS      TAPE-RECORDING AS DESCRIBED                               01318  5
*LEVEL          PRE-SCH,-K                                                01318  8
*GENERAL        ALL CANDIDATES                                            01318  7
*HOURS          BLANK                                                     01318  6
*EVALUATION     1, ANALYZE RECORDS AND FOR EACH AGE LEVEL, OR STAGE.      01318 26
                SUMMARIZE THE SINGLE LETTER SOUNDS, COMBINATIONS OF       01318 27
                LETTERS INTO SYLLABLES, REPETITION OF SYLLABLES AND       01318 28
                ORGANIZATION OF SYLLABLES INTO ATTEMPTS AT WORDS.         01318 29
                2. COMPARE THE AMOUNT OF VOCALIZATION OF INFANT IN EACH   01318 30
                STAGE WHEN ALONE AND WHEN MOTHER IS INTERACTING WITH HIM. 01318 31
*FILE           INFANCY  VOCALIZATION PRESPEECH  INTERACTION OF ADULT     01318  9
```

```
*OBJECTIVES     TO RECOGNIZE SIMPLE MENTAL PROCESSES EMERGING OUT OF      01319 19
                SENSORI MOTOR EXPERIENCES.                                01319 20
*PREREQUISITE 1, KNOWLEDGE OF KINDS OF EVIDENCE OF MEMORY, IMITATION AND01319 21
                PROBLEM-SOLVING WHICH TEND TO BE EXHIBITED BY 1-2 YEAR OLD01319 22
                CHILDREN.  2. KNOWLEDGE OF SITUATIONS, WHICH WOULD BE     01319 23
                LIKELY TO CALL SUCH PROCESSES INTO PLAY.  ≥BOTH 1 AND 2   01319 24
                MAY BE OBTAINED FROM LECTURE AND READING↑.                01319 25
*EXPERIENCE     OBSERVE FOR 45 MIN. TO AN HOUR, A 15-18 MO. OLD INFANT IN 01319 11
                AN ENVIRONMENT WHERE HE IS FREE TO EXPLORE, PREFERABLY IN 01319 12
                HIS OWN HOME OR OTHER FAMILIAR SURROUNDINGS.  RECORD      01319 13
                EVIDENCES FROM HIS OVERT BEHAVIOR OF EACH OF THE FOLLOWING01319 14
                MENTAL PROCESSES:  MEMORY, IMITATION, SIMPLE CAUSE-AND-   01319 15
                EFFECT REASONING.  IF DESIRED, AN ADULT FAMILIAR TO THE   01319 16
                CHILD, MAY CASUALLY INTRODUCE STIMULI OR SET THE STAGE TO 01319 17
                TRY TO ELICIT THE DESIRED RESPONSES.                      01319 18
*SETTING        INDEPENDENT  COMMUNITY                                    01319 10
*MATERIALS      AN INFANT, IN SETTING DESCRIBED.  DESIRED - SOME SIMPLE   01319  5
                TOYS ATTRACTIVE TO THE CHILD.                             01319
*LEVEL          PRE-SCH,-K                                                01319  8
*GENERAL        ALL CANDIDATES                                            01319  7
*HOURS          1 1/2                                                     01319  6
*EVALUATION     DESCRIBE SOME EXPERIENCES WHICH AN INFANT MIGHT HAVE IN   01319 26
                HIS HOME ≥EITHER OCCURRING IN A NORMAL DAY≤S ROUTINE OR   01319 27
                ESPECIALLY PLANNED FOR↑ WHICH WOULD TEND TO AID IN THE    01319 28
                DEVELOPMENT OF HIS EMERGING MENTAL PROCESSES OF MEMORY,   01319 29
                IMITATION AND PROBLEM-SOLVING.                            01319 30
*FILE           INFANCY  MENTAL PROCESS  SENSORY-MOTOR EXPERIENCES        01319  9
```

```
*OBJECTIVES     TO REALIZE THE RELATIONSHIP BETWEEN A YOUNG CHILD≤S       01320 19
                LIMITED ABILITY TO THINK AND THE IMMATURITY OF RELATED    01320 20
                MENTAL PROCESSES.                                         01320 21
*PREREQUISITE READINGS IN MENTAL DEVELOPMENT IN 2ND YEAR.                 01320 22
*EXPERIENCE     ALTHOUGH THINKING IS EMERGING IN THE SECOND YEAR, IT HAS  01320 11
                ITS LIMITATIONS DUE TO THE IMMATURITY OF CERTAIN MENTAL   01320 12
                PROCESSES.  COMPLETE EACH STATEMENT IN TERMS OF THE       01320 13
                LIMITING EFFECT EACH WOULD TEND TO HAVE UPON A CHILD≤S    01320 14
                THINKING.  1. HIS SHORT ATTENTION SPANS LIMITS ..........01320 15
                2, HIS ABILITY TO ASSOCIATE ONLY ONE OR TWO IMPRESSIONS   01320 16
```

```
               LIMITS ++++++++++++.  3. HIS TENDENCY TO ACT OUT HIS       01320 17
               HUNCHES LIMITS +++++++++++++++++.                          01320 18
*SETTING       LARGE GROUP  INDEPENDENT  COLLEGE                          01320 10
*MATERIALS     BLANK                                                      01320  5
*LEVEL         PRE-SCH.-K                                                 01320  8
*GENERAL       ALL CANDIDATES                                             01320  7
*HOURS         3/4                                                        01320  6
*EVALUATION    CITE AN INCIDENT OF A YOUNG CHILDSS PROBLEM SOLVING        01320 23
               ≥EITHER FROM AN OBSERVATION OR A TYPICAL, IMAGINARY ONE↑.  01320 24
               EXPLAIN HIS BEHAVIOR IN THE PROBLEM SOLVING SITUATION IN   01320 25
               LIGHT OF ONE OR MORE OF THE ABOVE MENTIONED LIMITATIONS.   01320 26
*FILE          INFANCY  THINKING  MENTAL PROCESSES                        01320  9
```

```
*OBJECTIVES    TO REALIZE THE VARITY OF WAYS A MOTHER ≥OR OTHER ADULT     01321 25
               CARING FOR INFANT↑ DOES OR DOESNOT CONTRIBUTE TO THE       01321 26
               SATISFACTORY PSYCHOLOGICAL DEVELOPMENT OF HER CHILD.       01321 27
*PREREQUISITE  KNOWLEDGE OF RESEARCH FINDINGS IN THIS AREA:  E.G. SEARS↓  01321 28
               RHEINGOLD↓ ALDRICH↓ PINNEAU↓ MALONEY↓ CASLER↓ ESCALONA↓    01321 29
               BRODY↓ GEWIRTZ.                                            01321 30
*EXPERIENCE    SPEND A FEW HOURS IN A HOME, INFORMALLY OBSERVING          01321 11
               INTERACTION BETWEEN MOTHER AND INFANT AND TALKING WITH     01321 12
               MOTHER ABOUT HER CHILD IN AN UNSTRUCTURED MANNER --        01321 13
               ENCOURAGE HER TO TELL WHAT INTERESTS HER.  MENTALLY NOTE   01321 14
               WAYS IN WHICH MOTHER DOES OR DOES NOT CONTRIBUTE TO THE    01321 15
               INFANTSS PSYCHOLOGICAL NEEDS:  WARMTH↓ SENSE OF SECURITY↓  01321 16
               A SATISFACTORY BALANCE OF DEPENDENCE - INDEPENDENCE.       01321 17
               IMMEDIATELY FOLLOWING THE VISIT, RECORD AS MANY INSTANCES  01321 18
               AS YOU CAN RECALL OF WAYS IN WHICH THE MOTHER DID OR DID   01321 19
               NOT CONTRIBUTE TO MEETING THE CHILDSS PSYCHOLOGICAL NEEDS.01321 20
               ≥THIS METHOD OF RECORDING IS LESS ACCURATE THAN ON-THE-    01321 21
               SPOT RECORDING BUT THE LATTER IS NOT SUGGESTED HERE LEST   01321 22
               IT CREATES TENSION FOR THE MOTHER AND SHE WOULD BE LESS    01321 23
               ABLE TO REACT NATURALLY WITH HER CHILD↑.                   01321 24
*SETTING       LARGE GROUP  INDEPENDENT  COMMUNITY                        01321 10
*MATERIALS     MOTHER AND CHILD IN A FAMILIAR SETTING                     01321  5
*LEVEL         PRE-SCH.-K                                                 01321  8
*GENERAL       ALL CANDIDATES                                             01321  7
*HOURS         3                                                          01321  6
*EVALUATION    COMPARE YOUR OBSERVATION DATA WITH FINDINGS OF RESEARCHERS01321 31
               IN THE AREA OF PSYCHOLOGICAL NEEDS OF INFANTS              01321 32
*FILE          INFANCY  MOTHERING  PSYCHOLOGICAL DEVELOPMENT              01321  9
```

```
*OBJECTIVES    TO OBSERVE THE NATURE OF INFANTILE EMOTIONAL BEHAVIOR.     01322 20
               TO OBSERVE FURTHER DIFFERENTIATION OF EMOTIONS WITH        01322 21
               INCREASING AGE.                                            01322 22
*PREREQUISITE  SOME SKILL IN JUDGING INFANTS APPROXIMATE AGE FROM         01322 23
               PHYSICAL DEVELOPMENT AND BEHAVIOR.  BACKGROUND READING IN  01322 24
               NATURE OF EMOTIONAL DEVELOPMENT IN INFANCY.                01322 25
*EXPERIENCE    ARRANGE TO VISIT A WELL-BABY CLINIC WHERE YOU MAY OBSERVE  01322 11
               INFANTS IN VARIOUS EMOTIONAL STATES.  E.G. FEAR ≥WHEN      01322 12
               APPROACHED BY STRANGERS↑↓ ANGER ≥WHEN TREATMENT IS         01322 13
               PAINFUL↑↓ JOYOUSNESS ≥WHEN REUNITED WITH MOTHER↑↓          01322 14
               AFFECTION GIVEN OR SOUGHT↓ GENERALIZED ANXIETY.  FOR EACH  01322 15
               EMOTIONAL EXPRESSION OBSERVED:  STATE APPROXIMATE AGE OF   01322 16
               INFANT.  IDENTIFY, IF POSSIBLE, THE TYPE OF FEELING BEING  01322 17
               EXPRESSED.  STATE STIMULUS WHICH APPARENTLY EVOKED THE     01322 18
               EMOTION.  STATE THE MODE AND DURATION OF THE EXPRESSION.   01322 19
*SETTING       INDEPENDENT  COMMUNITY                                     01322 10
*MATERIALS     BLANK                                                      01322  5
```

```
*LEVEL          PRE-SCH.-K                                              01322  8
*GENERAL        ALL CANDIDATES                                          01322  7
*HOURS          2                                                       01322  6
*EVALUATION     SUMMARIZE THE NATURE OF INFANTILE EMOTIONAL EXPRESSION:  01322 26
                TYPES AND VARIETY OF STIMULI, NATURE OF RESPONSES, ANY   01322 27
                DIFFERENTIATION WITH AGE OF CHILD.                       01322 28
*FILE           INFANCY  EMOTIONAL STATES  DIFFERENTIATION               01322  9
```

```
*OBJECTIVES     TO BECOME AWARE OF WAYS IN WHICH A TRUSTED ADULT MAY HELP 01323 15
                INFANT COPE WITH FEAR AND ANGER.                         01323 16
*PREREQUISITE   ABILITY TO OBSERVE SUBTLETIES OF BEHAVIOR.               01323 17
*EXPERIENCE     IN THE SITUATIONS DESCRIBED IN PREVIOUS MODULE ≥1322+ NOTE01323 11
                MEANS MOTHERS USED TO REDUCE CHILDREN≤S FEARS+ TO REDUCE  01323 12
                ANGER -- PREVENTIVE MEANS AS WELL AS MEANS OF CALMING    01323 13
                CHILD AFTER AROUSED.  NOTE DEGREE OF EFFECTIVENESS.      01323 14
*SETTING        INDEPENDENT  COMMUNITY                                   01323 10
*MATERIALS      BLANK                                                    01323  5
*LEVEL          PRE-SCH.-K                                               01323  8
*GENERAL        ALL CANDIDATES                                           01323  7
*HOURS          1 ≥IN ADDITION TO TIME IN PREVIOUS EXP. ≥14++.           01323  6
*EVALUATION     WHICH MEANS WERE EFFECTIVE^  WHICH WERE NOT^  EXPLAIN WHY 01323 18
                YOU THINK THEY WERE OR WERE NOT EFFECTIVE.               01323 19
*FILE           INFANCY  FEARS  ADULT BEHAVIOR HELPING                   01323  9
```

```
*OBJECTIVES     TO BE ABLE TO RECOGNIZE IN AN ACTUAL SITUATION OF FEAR,  01324 18
                THE ELEMENTS OF CONDITIONING AND RECONDITIONING.         01324 19
*PREREQUISITE   KNOWLEDGE OF THE PROCESS OF CONDITIONING AND OF          01324 20
                RECONDITIONING.                                          01324 21
*EXPERIENCE     READ THE CASE OF RECONDITIONING A CHILD≤S FEAR IN        01324 11
                LANDRETH, C. PSYCHOLOGY OF EARLY CHILDHOOD, 1960,        01324 12
                PP. 189-191.  WHAT WAS THE ORIGINAL STIMULUS WHICH       01324 13
                ELICITED THE FEAR RESPONSE^  WHAT WAS THE ASSOCIATED     01324 14
                STIMULUS WHICH ELICITED THE FEAR RESPONSE^  WHAT WAS THE 01324 15
                PRINCIPLE FOLLOWED IN THE RECONDITIONING PROCESS^  LIST  01324 16
                ALL THE TECHNIQUES USED IN FOLLOWING THIS PRINCIPLE.     01324 17
*SETTING        INDEPENDENT  COLLEGE                                     01324 10
*MATERIALS      THE CASE STUDY CITED                                     01324  5
*LEVEL          PRE-SCH.-K                                               01324  8
*GENERAL        ALL CANDIDATES                                           01324  7
*HOURS          3/4                                                      01324  6
*EVALUATION     SUMMARIZE BRIEFLY THE PROCESS BY WHICH THE CHILD IN THIS 01324 22
                CASE ACQUIRED A FEAR THROUGH CONDITIONING AND OF         01324 23
                OVERCOMING THE FEAR THROUGH RECONDITIONING.              01324 24
*FILE           INFANCY  FEAR  CONDITIONING                              01324  9
```

```
*OBJECTIVES     TO SEE ≥ON FILM+ THE EFFECTS ON INFANTS OF MATERNAL      01325 17
                DEPRIVATION.                                             01325 18
*PREREQUISITE   INFORMATION CONCERNING EFFECTS OF MATERNAL INFORMATION ON 01325 19
                EMOTIONAL AND INTELLECTUAL DEVELOPMENT OF INFANTS.       01325 20
*EXPERIENCE     VIEW FILM [GRIEF[ BY SPITZ, SHOWING INFANTS DEPRIVED OF  01325 11
                MOTHER OR MOTHER SUBSTITUTE FOR A PROLONGED PERIOD.  WHAT 01325 12
                WERE CHILDREN≤S REACTIONS DURING EARLY PART OF THE       01325 13
                SEPARATION^  AFTER PROLONGED SEPARATION^  AFTER RETURN OF 01325 14
                MOTHER^  WAS AGE OF CHILD AT TIME OF SEPARATION A FACTOR 01325 15
                IN SEVERITY OF EMOTIONAL REACTION^                       01325 16
*SETTING        LARGE GROUP  COLLEGE                                     01325 10
*MATERIALS      FILM, AS MENTIONED                                       01325  5
*LEVEL          PRE-SCH.-K                                               01325  8
```

```
*GENERAL        ALL CANDIDATES                                                01325  7
*HOURS          1 1/2                                                         01325  6
*EVALUATION     RELATE WHAT YOU SAW IN THE FILM TO WHAT YOU HAVE READ OF      01325 21
                MATERNAL DEPRIVATION EFFECTS ON EMOTIONAL DEVELOPMENT OF      01325 22
                CHILD ≥E.G. BOWLBY↓ YARROW↓ SpITZ↑↓ ON THE CHILD≤S            01325 23
                INTELLECTUAL DEVELOPMENT ≥GOLDFARB↓ RHEINGOLD↓ DENNIS         01325 24
                AND NAJARIAN↑.                                                01325 25
*FILE           INFANCY  LACK OF MOTHERING  INTELLECTUAL + EMOTIONAL          01325  9
                DEVELOPMENT                                                   01325

*OBJECTIVES     TO UNDERSTAND NEGATIVISM COMMONLY EMERGING IN TODDLERS IN 01326 18
                OUR AM-CULTURE AS A NATURAL DEVELOPMENT OF THE CHILD≤S        01326 19
                EMERGING SENSE OF AUTONOMY IN CONFLICT WITH AUTHORITY         01326 20
                ADULTS EXERCISE IN SOCIALIZATION OF THE CHILD.                01326 21
*PREREQUISITE   BLANK                                                         01326 22
*EXPERIENCE     IN OUR AMERICAN CULTURE CHILDREN FREQUENTLY SHIFT DURING      01326 11
                THE LATTER PART OF THE SECOND YEAR FROM COMPLIANT,            01326 12
                DEPENDENT BEHAVIOR TO SELF-ASSERTIVE BEHAVIOR SUCH AS         01326 13
                VERBALIZATIONS OF [ME DO[, [I WANT[, [NO[, [MINE[,            01326 14
                ACCOMPANIED BY EXPLOSIVE PROTEST WHEN THWARTED.  EXPLAIN      01326 15
                THIS BEHAVIOR IN TERMS OF ERICKSON≤S CONCEPT OF               01326 16
                PERSONALITY DEVELOPMENT AND THE PROCESS OF SOCIALIZATION. 01326 17
*SETTING        LARGE GROUP  INDEPENDENT  COLLEGE                             01326 10
*MATERIALS      BLANK                                                         01326  5
*LEVEL          PRE-SCH,-K                                                    01326  8
*GENERAL        ALL CANDIDATES                                                01326  7
*HOURS          3/4                                                           01326  6
*EVALUATION     WHAT IS THE CHILD≤S GOAL IN THESE SITUATIONS^  WHAT IS        01326 23
                ADULT≤S GOAL FOR THE CHILD^  TO WHAT DEGREE CAN THE TWO BE01326 24
                BROUGHT INTO HARMONY^  HOW^                                   01326 25
*FILE           INFANCY  SOCIALIZATION  NEGATIVISM                            01326  9

*OBJECTIVES     TO CLARIFY CONCEPT OF DEVELOPMENTAL TASKS.                    01327 17
*PREREQUISITE   TEXTBOOK READING OF HAVIGHURST≤S [DEVELOPMENTAL TASKS[.       01327 18
*EXPERIENCE     SELECT ONE OR TWO OF HAVIGHURST≤S [DEVELOPMENTAL TASKS[       01327 11
                WHICH ARE CHARACTERISTIC OF EARLY CHILDHOOD.  OBSERVE A       01327 12
                GROUP OF PRESCHOOL CHILDREN EITHER IN SCHOOL OR ON THE        01327 13
                PLAYGROUND OR OTHER INFORMAL SITUATIONS↓ NOTE EVIDENCES IN01327 14
                THEIR BEHAVIOR WHICH SUGGEST CHILDREN ARE ATTEMPTING TO       01327 15
                MEET THE TASKS SELECTED.                                      01327 16
*SETTING        BLANK  SCHOOL  OR COMMUNITY                                   01327 10
*MATERIALS      BLANK                                                         01327  5
*LEVEL          PRE-SCH,-K                                                    01327  8
*GENERAL        SPECIALIST                                                    01327  7
*HOURS          1/2                                                           01327  6
*EVALUATION     EVALUATE ATTEMPTS OF CHILDREN TO LEARN THEIR DEVELOPMENTAL01327 19
                TASKS THAT YOU HAVE SELECTED.                                 01327 20
*FILE           CHILD DEVELOPMENT PRINCIPLES  DEVELOPMENTAL TASKS             01327  9

*OBJECTIVES     TO SEE DEMONSTRATED THE BEHAVIORIST APPROACH TO               01328 21
                LEARNING IN ACTION.                                           01328 22
*PREREQUISITE   KNOW DEFINITIONS OF THE FOUR FUNDAMENTALS.                    01328 23
*EXPERIENCE     THERE ARE AT LEAST FOUR FUNDAMENTALS TO THE LEARNING          01328 11
                PROCESS:  DRIVE, CUE, RESPONSE, REWARD.  SELECT A             01328 12
                SITUATION IN WHICH YOU CAN OBSERVE A CHILD LEARNING TO DO 01328 13
                SOMETHING, I.E. A THREE YEAR OLD LEARNING TO RIDE A           01328 14
                TRICYCLE.  IN LIGHT OF THESE FUNDAMENTALS, DESCRIBE           01328 15
                PROCESS:  1. WHY DID CHILD WANT TO LEARN^  ≥DRIVE↑            01328 16
                2, WHAT DID HE NOTICE ABOUT THING HE WANTED TO MANIPULATE^01328 17
                ≥CUE↑  3. HOW DID CHILD RESPOND TO STIMULUS OF TRICYCLE^  01328 18
                ≥RESPONSE↑  4. WHAT DETERMINED WHICH RESPONSES CHILD MADE 01328 19
                WHILE LEARNING TO RIDE^  ≥REWARD↑                         01328 20
*SETTING        INDEPENDENT  COMMUNITY                                    01328 10
*MATERIALS      ONE PRESCHOOL AGE CHILD IN A LEARNING SITUATION OF SKILL. 01328  5
                ≥RIDING A TRIKE, LEARNING TO DRESS, ETC.↑                 01328
*LEVEL          PRE-SCH.-K                                                01328  8
*GENERAL        ALL CANDIDATES                                            01328  7
*HOURS          1/2  MAY HAVE TO REPEAT                                   01328  6
*EVALUATION     SUMMARIZE PROCESS OF LEARNING FROM OBSERVATIONS.  WRITE A 01328 24
                BRIEF COMMENTARY ON THE IMPLICATIONS OF THIS KNOWLEDGE FOR01328 25
                TEACHING PRESCHOOL CHILDREN.                              01328 26
*FILE           HUMAN THEORY, PRINCIPLES CHILD DEVELOPMENT  BEHAVORIST    01328  9
                APPROACH TO CHILD DEVELOPMENT  PRESCHOOL YEARS            01328
```

```
*OBJECTIVES     TO DEMONSTRATE CONCEPT OF [CENTERED THINKING[ IN THE      01329 19
                PRESCHOOLER AND THE TRANSITION TO CONSERVATION AS CHILD   01329 20
                GROWS OLDER.                                              01329 21
*PREREQUISITE GENERAL INFORMATION OF PIAGET≤S STAGE THEORY OF             01329 22
                INTELLECTUAL DEVELOPMENT                                  01329 23
*EXPERIENCE     PIAGET CLAIMS A CHILD≤S THOUGHT FOLLOW ONE ANOTHER WITHOUT01329 11
                DETERMINING ANY RELATIONSHIP BETWEEN THEM.  CHILD CAN ONLY01329 12
                FOCUS ON ONE ASPECT OF HIS PERCEPTIONS.  SELECT SEVERAL   01329 13
                CHILDREN BETWEEN AGES 4 TO 10 WITH EACH REPRESENTED.      01329 14
                DO PIAGET EXPERIEMENT WITH LIQUID.  ≥POUR LIQUID FROM ONE 01329 15
                CONTAINER INTO ANOTHER OF A DIFFERENT SHAPE AND ASK CHILD 01329 16
                WHETHER AMOUNT OF LIQUID HAS CHANGED^  OR  TIP CONTAINER  01329 17
                SO LEVEL OF LIQUID CHANGES AND ASK AGAIN.↑                01329 18
*SETTING        INDEPENDENT  SCHOOL  OR COMMUNITY                         01329 10
*MATERIALS      TWO GLASS CONTAINERS OF EQUAL VOLUME BUT OF DIFFERENT     01329  5
                SHAPE                                                     01329
*LEVEL          ALL GRADES                                                01329  8
*GENERAL        ALL CANDIDATES                                            01329  7
*HOURS          1                                                         01329  6
*EVALUATION     SUMMARIZE TRANSITION FROM [CENTERING[ TO [DECENTERING[ IN 01329 24
                ACQUIRING THE CONCEPT OF CONSERVATION FROM THE DATE       01329 25
                ACQUIRED AT THE DIFFERENT AGES.                           01329 26
*FILE           THEORY, PRINCIPLES CHILD DEVELOPMENT  PIAGETIAN THEORY    01329  9
                INTELLECTUAL DEVELOPMENT                                  01329
```

```
*OBJECTIVES     TO GET MEASURE OF EGOCENTRISM IN SPEECH OF CHILDREN AT    01330 26
                DIFFERENT AGE LEVELS.                                     01330 27
*PREREQUISITE GENERAL KNOWLEDGE OF PIAGET≤S STAGES OF DEVELOPMENT.        01330 28
*EXPERIENCE     PIAGET≤S THEORY OF INTELLECTUAL DEVELOPMENT INFERS A      01330 11
                CHILD≤S LANGUAGE DEVELOPS FROM EGOCENTRIC SPEECH TO       01330 12
                SOCIALIZED SPEECH, WITH CHILDREN≤S SPEECH IN PRESCHOOL    01330 13
                YEARS BEING LARGELY EGOCENTRIC.  SELECT SEVERAL CHILDREN, 01330 14
                AT LEAST ONE EACH AT AGE 3, 4, 5, 6, 7, 10.  OBSERVE IN   01330 15
                GROUP ACTIVITY NOT INFLUENCED BY ADULTS.  WRITE QUICKLY   01330 16
                CHILD≤S FIRST 50 VERBALIZATIONS.  DO FOR EACH CHILD.      01330 17
                LATE, LIST VERBALIZATIONS UNDER FOUR HEADINGS:  NO.  1ST  01330 18
                REMARK  TEXT  WHAT CHILD SAID  CATEGORY  ONE THROUGH      01330 19
                SEVEN*  REMARKS  COMMENTS ABOUT CHILD OR SITUATION        01330 20
                *EGOCENTRIC SPEECH:  1. REPETITION,  2. MONOLOGUE         01330 21
                3. COLLECTIVE MONOLOGUE  SOCIALIZED SPEECH:  4. ADAPTED   01330 22
                INFORMATION ≥EXCHANGE OF INFO. BETWEEN 2 CHILDREN↑        01330 23
                5, CRITICISM  6. ORDERS, COMMANDS OR THREATS,             01330 24
                7, QUESTIONS.                                             01330 25
```

```
*SETTING      INDEPENDENT  COMMUNITY  OR SCHOOL                        01330 10
*MATERIALS    CHILDREN AT PLAY EITHER IN A NURSERY SCHOOL OR INFORMAL  01330  5
              NEIGHBORHOOD SITUATION.                                  01330
*LEVEL        ALL GRADES                                               01330  8
*GENERAL      ALL CANDIDATES                                           01330  7
*HOURS        APPROX HALF HOUR EACH CHILD                              01330  6
*EVALUATION   ANALYZE CHILDRENSS SPEECH PATTERNS FROM DATA IN TERMS OF 01330 29
              EGOCENTRIC SPEECH VS. SOCIALIZED SPEECH, AND DETERMINE   01330 30
              STAGE LEVEL OF EACH CHILD IN PIAGETSS TERMS.             01330 31
*FILE         THEORY + PRINCIPLES OF CHILD DEVELOPMENT  LANGUAGE       01330  9
              DEVELOPMENT  PIAGET                                      01330
```

```
*OBJECTIVES   TO REINFORCE KNOWLEDGE GAINED FROM READING ASSIGNMENTS ON 01331 13
              BASIC PRINCIPLES OF GROWTH AND DEVELOPMENT.              01331 14
*PREREQUISITE GENERAL KNOWLEDGE OF PRINCIPLES OF GROWTH AND DEVELOPMENT 01331 15
              ACQUIRED BY READING CLASS ASSIGNMENTS.                   01331 16
*EXPERIENCE   VIEW FILM ON [PRINCIPLES OF DEVELOPMENT[.  DISCUSS       01331 11
              IMPORTANCE OF THESE PRINCIPLES FOR TEACHERS.             01331 12
*SETTING      LARGE GROUP  SMALLER GROUPS FOR DISCUSSION  COLLEGE      01331 10
*MATERIALS    A POSSIBLE FILM CHOICE:  MCGRAW-HILL, [PRINCIPLES OF     01331  5
              DEVELOPMENT[  ≥17 MINUTES+                               01331
*LEVEL        BLANK                                                    01331  8
*GENERAL      BLANK                                                    01331  7
*HOURS        1                                                        01331  6
*EVALUATION   LIST SEVERAL WAYS IN WHICH KNOWLEDGE OF THE [LAWS[ OF    01331 17
              GROWTH AND DEVELOPMENT CAN BE UTILIZED IN UNDERSTANDING  01331 18
              WHAT TO EXPECT FROM CHILDREN IN A CLASSROOM AT DIFFERENT 01331 19
              GRADE LEVELS.  ≥INCLUDE NURSERY SCHOOL+.                 01331 20
*FILE         THEORY + PRINCIPLES OF CHILD DEVELOPMENT                 01331  9
```

```
*OBJECTIVES   TO RECOGNIZE IN THE GROWTH DATA, PRINCIPLES OF GROWTH    01332 21
              BEING ACTUALIZED:  THE DECELERATING RATE, INDIVIDUAL     01332 22
              DIFFERENCES IN RATE AND SEX DIFFERENCES IN RATE.         01332 23
*PREREQUISITE KNOWLEDGE OF GROWTH PRINCIPLES AND KNOWLEDGE OF THE      01332 24
              NATURE AND USE OF IOWA GROWTH CURVES.  MODULE 1311       01332 25
*EXPERIENCE   FROM HEIGHT AND WEIGHT DATA OF TWO PRESCHOOL CHILDREN, A 01332 11
              BOY AND A GIRL, ACCUMULATED BETWEEN 2 AND 5 YEARS OF AGE, 01332 12
              PLOT EACH CHILDSS GROWTH CURVE ON THE IOWA GROWTH CURVES. 01332 13
              EXAMINE EACH CURVE FOR RATE OF GROWTH OVER THE 3-YEAR    01332 14
              INTERVAL AND COMPARE THEM WITH RATE OF GROWTH IN INFANCY, 01332 15
              AS PLOTTED IN 1311.  EXAMINE EACH CURVE FOR DEVIATIONS   01332 16
              FROM NORMAL.  COMPARE THE TWO CURVES FOR SEX DIFFERENCES 01332 17
              ≥THIS COULD BE PRESENTED BY INSTRUCTOR TO ENTIRE CLASS OR 01332 18
              INDIVIDUAL MEMBER COULD DO IT AS AN INDIVIDUAL EXPERIENCE 01332 19
              TO BE FOLLOWED BY GROUP DISCUSSION+.                     01332 20
*SETTING      LARGE GROUP  INDEPENDENT  COLLEGE                        01332 10
*MATERIALS    HEIGHT - WEIGHT DATA ON A BOY AND A GIRL OVER A 3 YEAR   01332  5
              PERIOD ≥2-5 YEARS OF AGE+ AND IOWA GROWTH CURVES         01332
*LEVEL        PRE-SCH.-K                                               01332  8
*GENERAL      ALL CANDIDATES                                           01332  7
*HOURS        1                                                        01332  6
*EVALUATION   SUMMARIZE FROM THE PLOTTED CURVES, EVIDENCES OF          01332 26
              DECELERATING RATE OF GROWTH, INDIVIDUAL DIFFERENCES AND  01332 27
              SEX DIFFERENCES IN RATE.  WERE THE TRENDS AS EXPECTED^   01332 28
              DISCUSS BRIEFLY.                                         01332 29
*FILE         PRESCHOOL CHILD  GROWTH DATA  INDIVIDUAL DIFFERENCES     01332  9
```

```
*OBJECTIVES    ABILITY TO ASSESS FROM NEARLY CHILD≤S BODY PROPORTIONS     01333 19
               COINCIDE WITH WHAT IS EXPECTED AT HIS LEVEL OF             01333 20
               DEVELOPMENT.  TO UNDERSTAND RELATION BETWEEN BODY          01333 21
               PROPORTIONS AND BODY DYNAMICS.                             01333 22
*PREREQUISITE KNOWLEDGE OF UNEVEN RATE OF GROWTH OF VARIOUS PARTS OF THE01333 23
               BODY.                                                      01333 24
*EXPERIENCE    EXAMINE A SEQUENCE OF FOUR PAIRS OF PHOTOGRAPHS OF A       01333 11
               CHILD≤S BODY * FULL-LENGTH, UNCLOTHED, REAR VIEW AND SIDE  01333 12
               VIEW - PHOTOGRAPHED AT 2 YR., 3 YR., 4 YR., 5 YR.  NOTE    01333 13
               BODY PROPORTIONS AND POSTURE AT EACH YEAR: SIZE OF HEAD,   01333 14
               LENGTH OF TORSO, LENGTH OF ARMS, LENGTH OF LEGS, ROUNDNESS01333 15
               OF CHEST, PROMINENCE OF ABDOMEN, DEGREE OF LORDOSIS, WIDTH01333 16
               OF PELVIS, KNOCK-KNEES, PRONATION OF ANKLES, POSITION OF   01333 17
               FEET.                                                      01333 18
*SETTING       INDEPENDENT  SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE          01333 10
*MATERIALS     FOUR PAIRS OF PHOTOGRAPHS, AS CITED ABOVE.                 01333  5
*LEVEL         PRE-SCH,-K                                                 01333  8
*GENERAL       ALL CANDIDATES                                             01333  7
*HOURS         1                                                          01333  6
*EVALUATION    SUMMARIZE CHANGING BODY PROPORTIONS AND CHANGING POSTURE   01333 25
               FROM 2 TO 5 YR.  ACCOUNT FOR THESE CHANGES IN TERMS OF     01333 26
               RATE OF GROWTH OF VARIOUS PARTS OF THE BODY.  WHY CAN A    01333 27
               5 YR. OLD MORE READILY MAINTAIN BALANCE THAN A TWO-YEAR    01333 28
               OLD^  ≥EXPLAIN IN TERMS OF BODY PROPORTIONS↑.  WHAT        01333 29
               POSTURAL ADJUSTMENTS DOES 2 YR. OLD MAKE TO ACCOMMODATE    01333 30
               LARGE HEAD AND PROMINENT ABDOMEN^                          01333 31
*FILE          PRESCHOOL CHILD  BODY  DEVELOPMENT                         01333  9
```

```
*OBJECTIVES    TO ILLUSTRATE DEGREE OF OSSIFICATION EXPECTED BETWEEN 2-5 01334 21
               YR.↓ INDIVIDUAL DIFFERENCES IN RATE OF CALCIFICATION↓ SEX 01334 22
               DIFFERENCES IN RATE OF CALCIFICATION.                      01334 23
*PREREQUISITE KNOWLEDGE OF COMPOSITION OF IMMATURE BONES.  KNOWLEDGE     01334 24
               THAT SKELETAL DEVELOPMENT IN HAND AND WRIST IS GOOD INDEX 01334 25
               OF OVER-ALL SKELETAL DEVELOPMENT OF THE ORGANISM.          01334 26
*EXPERIENCE    TO BE PRESENTED BY INSTRUCTOR TO CLASS.  EXAMINE 4 SETS OF01334 11
               X-RAYS OF BONES OF HAND AND WRIST AS FOLLOWS:  1.  NORM    01334 12
               FOR BOYS AT 2 YR.↓ 3 YR.↓ 4 YR.↓ 5 YR.  2.  NORM FOR GIRLS01334 13
               AT 2 YR.↓ 3 YR.↓ 4 YR.↓ 5 YR.  3.  OF AN INDIVIDUAL GIRL   01334 14
               AT 2 YR.↓ 3 YR.↓ 4 YR.↓ 5 YR.  4.  OF AN INDIVIDUAL BOY AT01334 15
               2 YR.↓ 3 YR.↓ 4 YR.↓ 5 YR.  NOTE AMOUNT OF OSSIFICATION AT01334 16
               EACH AGE IN EACH SET.  TRACE AMOUNT OF OSSIFICATION        01334 17
               BETWEEN 2 AND 5 YR. FOR EACH CHILD.  COMPARE AMOUNT OF     01334 18
               OSSIFICATION FOR EACH CHILD AT EACH AGE WITH NORM FOR HIS 01334 19
               AGE AND SEX.                                               01334 20
*SETTING       LARGE GROUP  COLLEGE                                       01334 10
*MATERIALS     4 SETS OF X-RAYS AS INDICATED ABOVE.  APPROPRIATE LIGHTING01334  5
*MATERIALS     TO DISPLAY X-RAYS.                                         01334
*LEVEL         PRE-SCH,-K                                                 01334  8
*GENERAL       ALL CANDIDATES                                             01334  7
*HOURS         1                                                          01334  6
*EVALUATION    SUMMARIZE EVIDENCES OF DEGREE OF OSSIFICATION FROM 2 TO 5 01334 27
               YR. FOR BOYS↓ FOR GIRLS.                                   01334 28
*FILE          PRESCHOOL CHILD  BONE DEVELOPMENT AGES 2-5                 01334  9
```

```
*OBJECTIVES    TO BECOME KNOWLEDGEABLE CONCERNING THE NATURE OF           01335 15
               IMMATURITY OF THE SKELETAL SYSTEM AND ITS SUSCEPTIBILITY   01335 16
               TO DAMAGE.                                                 01335 17
*PREREQUISITE READINGS ON SKELETAL DEVELOPMENT.                           01335 18
*EXPERIENCE    IMMATURE BONES, BECAUSE OF CERTAIN CHARACTERISTICS, ARE    01335 11
               MORE EASILY DAMAGED BY PRESSURE AND INFECTION THAN ARE     01335 12
```

```
                 MATURE BONES.  WHAT ARE THESE CHARACTERISTICS AND HOW DOES01335 13
                 EACH RELATE TO THE BONES< SUSCEPTIBILITY TO DAMAGE^        01335 14
*SETTING         LARGE GROUP  INDEPENDENT  COLLEGE                          01335 10
*MATERIALS       REFERENCES ON SKELETAL DEVELOPMENT.                        01335  5
*LEVEL           PRE-SCH,-K                                                 01335  8
*GENERAL         ALL CANDIDATES                                             01335  7
*HOURS           1/2                                                        01335  6
*EVALUATION      STATE MEASURES THAT MIGHT BE TAKEN IN THE PHYSICAL CARE OF01335 19
                 CHILDREN TO LESSEN CHANCES FOR BONE DAMAGE DUE TO PRESSURE01335 20
                 AND TO INFECTION.                                          01335 21
*FILE            PRESCHOOL CHILD  SKELETAL SYSTEM  BONE DAMAGE              01335  9

*OBJECTIVES      TO BE AWARE OF LEVEL OF MUSCULAR DEVELOPMENT OF PRESCHOOL 01336 23
                 CHILDREN AND THE IMPLICATIONS FOR PLANNING PROGRAMS FOR   01336 24
                 PRESCHOOLERS.                                             01336 25
*PREREQUISITE    READINGS IN DEVELOPMENT OF MUSCULAR SYSTEM IN EARLY       01336 26
                 CHILDHOOD.                                                01336 27
*EXPERIENCE      THE FOLLOWING ASPECTS OF QUALITATIVE GROWTH AND           01336 11
                 FUNCTIONING OF THE MUSCULAR SYSTEM ARE CHARACTERISTIC IN  01336 12
                 PRESCHOOL YEARS:  1.  MUSCLES ARE LOOSELY ATTACHED TO     01336 13
                 BONES.  2.  MUSCLES ARE COMING INCREASINGLY UNDER CONTROL 01336 14
                 OF CENTRAL NERVOUS SYSTEM.  3.  MUSCLES OF UPPER PART OF  01336 15
                 BODY ARE MORE DEVELOPED THAN THOSE OF LOWER PARTS.  4.    01336 16
                 LARGE MUSCLES ARE UNDER CONTROL MORE THAN ARE FINE        01336 17
                 MUSCLES.  5.  CHANGES OF TEMPO ARE ERRATIC.  6.  CHILD IS 01336 18
                 UNABLE TO SIT STILL LONG.  7.  CHILD TIRES EASILY AND     01336 19
                 RECOVERS QUICKLY.  HOW ARE THE ABOVE REFLECTED IN WISE    01336 20
                 PLANNING OF ACTIVITIES AND ENVIRONMENT SUITED TO LEVEL OF 01336 21
                 DEVELOPMENT OF PRESCHOOL CHILDREN^                        01336 22
*SETTING         INDEPENDENT  SMALL GROUP >1-12 STUDENTS+  COLLEGE         01336 10
*MATERIALS       BLANK                                                     01336  5
*LEVEL           PRE-SCH,-K                                                01336  8
*GENERAL         ALL CANDIDATES                                            01336  7
*HOURS           2                                                         01336  6
*EVALUATION      PLAN A ONE-HOUR OUTDOOR PLAY PERIOD FOR PRESCHOOL         01336 28
                 CHILDREN.  OBSERVE CHILDREN FUNCTIONING IN IT.  EVALUATE  01336 29
                 IT IN TERMS OF HOW IT MET NEEDS OF CHILDREN AT THEIR LEVEL01336 30
                 OF MUSCULAR DEVELOPMENT.                                  01336 31
*FILE            PRESCHOOL CHILD  MUSCLE DEVELOPMENT  PROGRAM PLANNING     01336  9

*OBJECTIVES      TO RECOGNIZE QUALITATIVE GROWTH IN MOTOR CONTROL DURING   01337 20
                 PRESCHOOL YEARS.                                          01337 21
*PREREQUISITE    COMPETENCY IN OBSERVING AND RECORDING CHILDREN<S BEHAVIOR.01337 22
                 KNOWLEDGE OF EXPECTED PROGRESS IN MOTOR CONTROL DURING    01337 23
                 PRESCHOOL YEARS, FROM LECTURE AND FROM READINGS.          01337 24
*EXPERIENCE      OBSERVE A YOUNG PRESCHOOL CHILD, ABOUT 2-9 TO 3-3 YR., AND01337 11
                 AN OLDER PRESCHOOLER, ABOUT 4-6 TO 5 YR., IN THREE OR FOUR01337 12
                 SIMILAR KINDS OF MOTOR ACTIVITIES - SOME GROSS MOTOR, SOME01337 13
                 MANUAL.  E.G. GROSS MOTOR: CLIMBING, RUNNING, HOPPING,    01337 14
                 RIDING TRICYCLE.  MANUAL: USING CRAYONS, SCISSORS, EATING 01337 15
                 UTENSILS, FASTENING OR UNFASTENING CLOTHING.  COMPARE BODY01337 16
                 MOVEMENTS AND DEGREE OF MOTOR CONTROL EXHIBITED BY THE    01337 17
                 YOUNGER AND THE OLDER CHILD IN EACH PAIR OF ACTIVITIES.   01337 18
                 COMPARE EACH WITH EXPECTED NORMS FOR HIS AGE.             01337 19
*SETTING         INDEPENDENT  SCHOOL OR COMMUNITY                          01337 10
*MATERIALS       BLANK                                                     01337  5
*LEVEL           PRE-SCH,-K                                                01337  8
*GENERAL         ALL CANDIDATES                                            01337  7
*HOURS           1 >1/2 OBSERVATION AND 1/2 SUMMARIZING+.                  01337  6
```

```
*EVALUATION    SUMMARIZE PROGRESS IN MOTOR DEVELOPMENT FROM YOUNGER TO   01337 25
               OLDER CHILD, AS OBSERVED AND AS EXPECTED.                 01337 26
*FILE          PRESCHOOL CHILD  MOTOR CONTROL                            01337  9
```

```
*OBJECTIVES    TO REALIZE RELATIONSHIP OF MOTOR DEVELOPMENT TO OTHER     01338 29
               ASPECTS OF DEVELOPMENT.                                   01338 30
*PREREQUISITE  BACKGROUND OF OBSERVATION OF MOTOR BEHAVIOR OF 2-5 YR.    01338 31
               OLDS SO AS TO ENABLE THE STUDENT TO CITE EXAMPLES, AS     01338 32
               INDICATED ABOVE.                                          01338 33
*EXPERIENCE    THE FOLLOWING STATEMENTS INDICATE SOME RELATIONSHIPS OF   01338 11
               MOTOR SKILLS TO OTHER FACETS OF A CHILD≤S DEVELOPMENT: 1. 01338 12
               HE TENDS TO USE OVERT ACTIONS TO SUBSTITUTE FOR, OR TO    01338 13
               SUPPLEMENT, REASONING PROCESSES IN PROBLEM SOLVING.  2.   01338 14
               HE USES GESTURES AS SUBSTITUTES FOR, OR ACCOMPANIMENTS TO 01338 15
               WORDS.  3.  MOTOR COMPETENCE INCREASES HIS                01338 16
               SELF-CONFIDENCE, INDEPENDENCE, AND SOCIAL ASSURANCE WITH  01338 17
               HIS PEERS.  4.  MOTOR BEHAVIOR REVEALS HIS EMOTIONS TO    01338 18
               OTHERS AND PROMOTES HEALTHY EXPRESSION OF FEELINGS FOR    01338 19
               HIM.  5.  COMPETENCE IN LARGE MOTOR SKILLS DEVELOPS       01338 20
               COURAGE↓ CAUTION, WITHOUT UNDUE ANXIETY.  ILLUSTRATE THREE01338 21
               OF THE ABOVE WITH EXAMPLES AS SEEN IN A PRESCHOOL CHILD≤S 01338 22
               BEHAVIOR.  EXAMPLES MAY BE EITHER ACTUAL SITUATIONS YOU   01338 23
               HAVE OBSERVED OR IMAGINARY ONES, TYPICAL OF MOTOR BEHAVIOR01338 24
               OF A 2-5 YR. OLD.  EXAMPLES MAY BE POSITIVE OR NEGATIVE,  01338 25
               I.E. WHERE MOTOR COMPETENCY WAS AN ASSET OR THE LACK OF   01338 27
               IT, A LIABILITY.                                          01338 28
*SETTING       INDEPENDENT  COLLEGE                                      01338 10
*MATERIALS     BLANK                                                     01338  5
*LEVEL         PRE-SCH,-K                                                01338  8
*GENERAL       ALL CANDIDATES                                            01338  7
*HOURS         1 1/2                                                     01338  6
*EVALUATION    FOR EACH EXAMPLE, EXPLAIN IN WHAT WAYS THE CHILD≤S MOTOR  01338 34
               DEVELOPMENT INFLUENCED THE OTHER ASPECT OF DEVELOPMENT IN 01338 35
               THE SITUATION.                                            01338 36
*FILE          PRESCHOOL CHILD  MOTOR SKILLS                             01338  9
```

```
*OBJECTIVES    TO OBTAIN PRACTICE IN ASKING THE TYPES OF QUESTIONS THAT  01339 18
               FOSTER CREATIVITY, DISCOVERY, AND [GOING BEYOND[ PRESENT  01339 19
               KNOWLEDGE IN CHILDREN.                                    01339 20
*PREREQUISITE  BLANK                                                     01339 21
*EXPERIENCE    PLAN A SIMPLE EXPERIMENT WITH A GROUP OF FOUR OR FIVE YEAR01339 11
               OLD CHILDREN.  ≥EX: PLANTING FLOWER SEEDS↓ USING A MAGNET,01339 12
               ETC↑.  USE EXPERIMENT AS A MEANS OF DEVELOPING LANGUAGE,  01339 13
               AND FOSTERING INDEPENDENT THINKING.  WHAT KINDS OF        01339 14
               QUESTIONS WOULD YOU USE^  OPEN-ENDED^  FACTUAL OR NOT^  I 01339 15
               WONDER WHY .....^  WHAT IF ....^  IF YOU DO THIS, WHAT    01339 16
               WILL HAPPEN ......^                                       01339 17
*SETTING       INDEPENDENT  SCHOOL                                       01339 10
*MATERIALS     A PRESCHOOL OR KINDERGARTEN CLASS.                        01339  5
*LEVEL         PRE-SCH,-K                                                01339  8
*GENERAL       ALL CANDIDATES                                            01339  7
*HOURS         30 MIN. - 45 MIN.                                         01339  6
*EVALUATION    PLAN AN EXPERIMENT.  FROM YOUR EXPERIENCE, LIST TYPES OF  01339 22
               QUESTIONS YOU, AS A TEACHER, WOULD ASK A FOUR YEAR OLD, OR01339 23
               A FIVE YEAR OLD, SO AS TO KEEP CHILDREN≤S INTEREST AND    01339 24
               LEARNING AT AN OPTIMUM LEVEL.                             01339 25
*FILE          PRESCHOOL CHILD  INTELLECTUAL DEV.  PRESCHOOL-K           01339  9
```

```
*OBJECTIVES    TO CLARIFY CONCEPTS RELEVANT TO THE DEVELOPMENT OF           01340 15
               INTELLIGENCE ACCORDING TO PIAGET≤S FORMULATIONS.             01340 16
*PREREQUISITE  SOME TEXTBOOK KNOWLEDGE OF PIAGET≤S THEORY.                  01340 17
*EXPERIENCE    VIEW FILM: [PIAGET≤S DEVELOPMENTAL THEORY:  CONSERVATION[.01340 11
               NOTE, IN PARTICULAR THE FORM OF DR. STENLER≤S QUESTIONS.     01340 12
               ≥NEXT MODULE, NO. 10↑.  DISCUSS FILM IN LIGHT OF PIAGET≤S    01340 13
               THEORY OF THE DEVELOPMENT OF INTELLECTUAL FUNCTIONING.       01340 14
*SETTING       LARGE GROUP  SMALLER GROUPS FOR DISCUSSION  COLLEGE          01340 10
*MATERIALS     FILM:  [PIAGET≤S DEVELOPMENTAL THEORY:  CONSERVATION[        01340  5
               ≥MICH. STATE↑.                                               01340
*LEVEL         ALL GRADES                                                   01340  8
*GENERAL       ALL CANDIDATES                                               01340  7
*HOURS         FILM: 20 MIN.+ DISCUSS 2. MIN.                               01340  6
*EVALUATION    REPEAT LIQUID TESTS SHOWN IN FILM WITH INDIVIDUAL CHILDREN01340 18
               AT VARYING AGES FROM 4 TO 10.  WRITE UP RESULTS AND          01340 19
               INTERPRET THEM ACCORDING TO PIAGET.                          01340 20
*FILE          HUMAN LEARNING PRESCHOOL CHILD  INTELLECTUAL DEVELOPMENT     01340  9
               PIAGET                                                       01340

*EXPERIENCE    REFER TO MODULE ≥SHOWING OF PIAGET FILM ON CONSERVATION↑.    01341 11
               1340.  IN LIGHT OF THE TYPE OF QUESTIONS NEEDED TO           01341 12
               ENCOURAGE CHILDREN TO BE CREATIVE, THINK, AND COME TO        01341 13
               THEIR OWN CONCLUSIONS FROM THE EVIDENCE THEY PERCEIVE,       01341 14
               CRITICALLY EXAMINE DR. STENLER≤S QUESTIONS IN THE FILM.      01341 15
               1.  IN WHAT WAY DID HER QUESTIONING SERVE TO LIMIT           01341 16
               CHILDREN≤S DISCOVERY^  2.  WHAT OTHER [MISTAKES[ WERE        01341 17
               EVIDENT.  DISCUSS.                                           01341 18
*OBJECTIVES    TO HELP PROSPECTIVE TEACHERS BECOME AWARE OF THE             01341 19
               IMPORTANCE OF ASKING THE OPEN-ENDED TYPE OF QUESTIONS.       01341 20
*PREREQUISITE  PREVIOUS DISCUSSION OF THE [ART[ OF ASKING QUESTIONS TO      01341 21
               LEAD CHILDREN TO THINK.                                      01341 22
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑                                  01341 10
*MATERIALS     FILM: FROM MODULE NO. 1340.                                  01341  5
*LEVEL         ALL GRADES                                                   01341  8
*GENERAL       ALL CANDIDATES                                               01341  7
*HOURS         30 MIN.                                                      01341  6
*EVALUATION    CONSIDERING THE EXPERIMENT IN THE FILM, DRAFT A LIST OF      01341 23
               QUESTIONS THAT WOULD LEAD CHILDREN TO DO THEIR OWN           01341 24
               THINKING, TO [DISCOVER[.                                     01341 25
*FILE          PRESCHOOL CHILD  INTELLECTUAL DEVEL.  PIAGET                 01341  9

*EXPERIENCE    SAME AS MODULE 1341 EXCEPT PLAN AN EXPERIMENT WITH THREE     01342 11
               YEAR OLDS IN A NURSERY SCHOOL GROUP.  WHAT KINDS OF          01342 12
               QUESTIONS WOULD YOU ASK THAT WOULD BE CONSONANT WITH THEIR01342 13
               AGE LEVEL.                                                   01342 14
*OBJECTIVES    SAME AS MODULE 1341.                                         01342 15
*PREREQUISITE  BLANK                                                        01342 16
*SETTING       INDEPENDENT                                                  01342 10
*MATERIALS     3 YEAR OLD PRESCHOOL GROUP.                                  01342  5
*LEVEL         PRE-SCH.-K                                                   01342  8
*GENERAL       SPECIALIST                                                   01342  7
*HOURS         15 - 20 MIN.                                                 01342  6
*EVALUATION    SAME AS MODULE 1341.                                         01342 17
*FILE          PRESCHOOL CHILD  INTELLECTUAL DEV.  PRESCHOOL-K              01342  9

*EXPERIENCE    WORK IN TEAMS OF FOUR.  SELECT FOUR CHILDREN AT DIFFERENT    01343 11
               PRESCHOOL AGE LEVELS, TWO BOYS BETWEEN 3-4 YEARS OF AGE+     01343 12
               TWO BOYS BETWEEN 5-6 YEARS OF AGE.  ASK EACH CHILD TO        01343 13
               DEFINE WORDS OF FAMILIAR OBJECTS:  ORANGE, DOG, CLOCK,   01343 14
               ETC.  CHOOSE TEN WORDS.  WRITE ANSWERS VERBATIM.         01343 15
*PREREQUISITE  GENERAL KNOWLEDGE OF PRESCHOOL NORMS IN AREA OF LANGUAGE. 01343 19
*OBJECTIVES    TO TEST PIAGET≤S ≀HIERARCHY OF UNDERSTANDING,[ IN WHICH  01343 16
               CHILDREN WILL RESPOND AT DIFFERENT LEVELS, EACH STATE    01343 17
               BEING DEPENDENT UPON PRIOR CONCEPTUAL UNDERSTANDING.     01343 18
*SETTING       SMALL GROUP ≥1-12 STUDENTS†  COMMUNITY OR SCHOOL         01343 10
*MATERIALS     CHILDREN AT DIFFERENT AGE LEVELS.                        01343  5
*LEVEL         PRE-SCH,-K                                               01343  8
*GENERAL       SPECIALIST                                               01343  7
*HOURS         1/2 HOUR+ ONE INVESTIGATOR PER CHILD.                    01343  6
*EVALUATION    PRESENT A PANEL DISCUSSION TO THE CLASS HOW CHILDREN≤S   01343 20
               RESPONSES ABOVE FIT PIAGET≤S CONCEPTIONS OF VARYING AGE  01343 21
               LEVELS OF DEFINITION IN TERMS OF FUNCTION, DESCRIPTION,  01343 22
               ILLUSTRATION, DEMONSTRATION, SYNONYMS, AND EXPLANATION   01343 23
               TYPES OF RESPONSE.                                       01343 24
*FILE          HUMAN LEARNING PRESCHOOL CHILD  INTELLECTUAL DEV.        01343  9
               PRESCHOOL-K                                              01343

*OBJECTIVES    SAME AS 1343 MODULE+ IN ADDITION, TO OBSERVE SEX         01344 13
               DIFFERENCES IN LANGUAGE.                                 01344 14
*PREREQUISITE  SAME AS 1343 MODULE.                                     01344 15
*EXPERIENCE    REPEAT EXPERIENCE OF 1343 MODULE BUT SELECT GIRLS INSTEAD 01344 11
               OF BOYS,                                                 01344 12
*SETTING       SMALL GROUP ≥1-12 STUDENTS†                              01344 10
*MATERIALS     BLANK                                                    01344  5
*LEVEL         PRE-SCH,-K                                               01344  8
*GENERAL       SPECIALIST                                               01344  7
*HOURS         SAME AS 1343 MODULE.                                     01344  6
*EVALUATION    SAME AS 1343 MODULE+ IN ADDITION DISCUSS SEX DIFFERENCES 01344 16
               IN THE USE OF LANGUAGE BETWEEN BOYS AND GIRLS USING DATA 01344 17
               PLUS READINGS.                                           01344 18
*FILE          PRESCHOOL CHILD  INTELL. DEV.  PRE-SCHOOL-K              01344  9

*OBJECTIVES    TO GAIN INSIGHT IN THE ROLE OF LANGUAGE IN CONCEPT       01345 16
               DEVELOPMENT AT THE PRESCHOOL LEVEL ≥BEFORE FIRST GRADE†. 01345 17
*PREREQUISITE  SAME AS MODULE 1339.                                     01345 18
*EXPERIENCE    USING DATA OF MODULE 1339, GIVE EXAMPLES OF EGOCENTRIC   01345 11
               SPEECH USED AS 1.  PROBLEM SOLVING.  2.  AS A            01345 13
               REPRESENTATION OF A CONCEPT.  3.  AS A MEANS OF SORTING. 01345 14
               LABELLING, CLASSIFYING EXPERIENCES.                      01345 15
*SETTING       INDEPENDENT                                              01345 10
*MATERIALS     NONE.                                                    01345  5
*LEVEL         PRE-SCH,-K                                               01345  8
*GENERAL       SPECIALIST                                               01345  7
*HOURS         1                                                        01345  6
*EVALUATION    DISCUSS HOW PRESCHOOLERS USE LANGUAGE.                   01345 19
*FILE          HUMAN LEARNING PRESCHOOL CHILD  INTELLECTUAL DEVELOPMENT 01345  9
               PRESCHOOL CHILD                                          01345

*OBJECTIVES    TO DETERMINE EXTENT OF CHILD≤S UNDERSTANDING OF THESE    01346 18
               CONCEPTS AT THE PRESCHOOL LEVEL AND TO OBSERVE TEACHER≤S 01346 19
               ROLE IN PROMOTING THIS DEVELOPMENT OF CONCEPTS.          01346 20
*PREREQUISITE  A KNOWLEDGE OF WHAT THESE CONCEPTS MEAN.                 01346 21
*EXPERIENCE    OBSERVE NURSERY CLASS AND TAKE NOTES OF NUMBER OF CHILDREN01346 11
               WHO USED WORDS DENOTING PROPERTIES OF CONCRETE OBJECTS   01346 12
               THEY USED DURING PLAY.  1.  TEXTURE WORDS, 2.  WORDS     01346 13
               INDICATING COLOR, 3.  WORDS OF SIZE+ WORDS INDICATING    01346 14
```

```
              WEIGHT WORDS INDICATING FORM.  2.  WERE THEY ENCOURAGED BY01346 15
              TEACHER^  2.  VERBALLY^  OR THROUGH ARRANGEMENT OF        01346 16
              MATERIAL AND EQUIPMENT^                                   01346 17
*SETTING      INDEPENDENT  SCHOOL                                       01346 10
*MATERIALS    NURSERY SCHOOL CLASS.  A FEW CHILDREN AVAILABLE FOR       01346  5
              OBSERVATION.                                              01346
*LEVEL        PRE-SCH.-K                                                01346  8
*GENERAL      SPECIALIST                                                01346  7
*HOURS        1/2                                                       01346  6
*EVALUATION   WRITE A REPORT OF WAYS TEACHERS CAN ENCOURAGE THESE       01346 22
              CONCEPTUAL LEARNINGS.                                     01346 23
*FILE         INTELLECTUAL DEV. PRESCHOOL CHILD  LANGUAGE  PRESCHOOL-K  01346  9
```

```
*OBJECTIVES   TO BECOME AWARE OF ELEMENTARY TYPES OF ABSTRACT           01347 20
              RELATIONSHIPS USED BY YOUNG CHILDREN.                     01347 21
*PREREQUISITE KNOW WHAT CONCEPTS MEAN.                                  01347 22
*EXPERIENCE   WORK IN TEAMS OF FOUR STUDENTS.  OBSERVE A KINDERGARTEN   01347 11
              CLASS.  EACH STUDENT FOCUS ON ONE ASPECT:  1.  WHAT       01347 12
              EVIDENCE IS THERE THAT CHILDREN ARE USING QUANTITATIVE    01347 13
              CONCEPTS^  A.  CARDINAL AND ORDINAL MEANINGS OF NUMBERS.  01347 14
              B.  ORDERING - SERIATION >SIZES, QUANTITIES, QUALITIES OF 01347 15
              PROPERTIES+.  2.  CITE EVIDENCE OF USE OF SPATIO-TEMPORAL 01347 16
              RELATIONSHIPS.  A.  SPATIAL--PREPOSITIONS OF RELATIONSHIP 01347 17
              ≥I.E. CLIMBING OVER SOMETHING+.  B.  TEMPORAL--IF, THEN+  01347 18
              BEFORE WE GO OUTDOORS, ETC.                               01347 19
*SETTING      LARGE GROUP  SMALLER CLASS FOR OBSERVATION  SCHOOL        01347 10
*MATERIALS    A KINDERGARTEN CLASS IN SESSION.                          01347  5
*LEVEL        PRE-SCH.-K                                                01347  8
*GENERAL      SPECIALIST                                                01347  7
*HOURS        1                                                         01347  6
*EVALUATION   POOL INFORMATION. DISCUSS WITH TOTAL CLASS.  TOGETHER WORK01347 23
              OUT SENTENCES AND QUESTIONS THAT WILL LEAD CHILDREN TO USE01347 24
              ABOVE CONCEPTS.  EX:  FOSTER ABILITY TO DISCRIMINATE SIZES01347 25
              BY SAYING, PUT ALL THE BLOCKS IN THE BIGGEST BOX.  ≥ALSO  01347 26
              QUANTITY<+                                                01347 27
*FILE         INTELLECTUAL DEV.  CONCEPT DEV.  PRESCHOOL-K              01347  9
```

```
*OBJECTIVES   TO BECOME AWARE OF CHILDREN<S USAGE OF WORDS ≥THOUGH NOT  01348 15
              UNDERSTOOD+ OF [SPACE WORDS[: BIG, LITTLE+ LONG, SHORT+   01348 16
              UP, DOWN+ IN, OUT+ ETC.                                   01348 17
*PREREQUISITE ABILITY TO RELATE TO YOUNG CHILDREN IN A SCHOOL SITUATION.01348 18
*EXPERIENCE   USE SIMPLE GAMES INVOLVING SPATIAL RELATIONSHIPS WITH     01348 11
              PRESCHOOL CHILDREN.  EX: [SOMETIMES I<M VERY, VERY SMALL[ 01348 12
              ≥SQUATTING WITH CHILDREN+ THEN STRETCH UP ON TIPTOE+, AND 01348 13
              SAY, [SOMETIMES I<M VERY, VERY TALL.[                     01348 14
*SETTING      15 NURSERY SCHOOL CHILDREN  COMMUNITY OR SCHOOL           01348 10
*MATERIALS    BLANK                                                     01348  5
*LEVEL        PRE-SCH.-K                                                01348  8
*GENERAL      SPECIALIST                                                01348  7
*HOURS        15 MINUTES                                                01348  6
*EVALUATION   DEVISE A PLAN OF EXPERIENCES WHICH WOULD CALL FOR USE AND 01348 19
              REINFORCEMENT OF WORDS RELATING TO SPATIAL CONCEPTS IN THE01348 20
              EDUCATION OF YOUNG CHILDREN.                              01348 21
*FILE         HUMAN LEARNING  INTELLECTUAL DEV.  PRESCHOOL-K            01348  9
```

```
*OBJECTIVES   TO SEE DEMONSTRATED FAMILY INTERACTION IN THE USE OF      01349 17
              LANGUAGE.                                                 01349 18
*PREREQUISITE KNOWLEDGE AND SKILL IN TAKING [RUNNING NOTES[ ON          01349 19
```

```
                OBSERVATIONS OF A SMALL GROUP.                          01349 20
*EXPERIENCE     OBSERVE FOR A SEGMENT OF TIME ≥ABOUT ONE HOUR+ DEPENDING 01349 11
                ON CIRCUMSTANCES IN A MIDDLE CLASS HOME WHEN PRESCHOOL AND01349 12
                SCHOOL AGE CHILDREN ARE AWAKE AND AT HOME WITH THEIR    01349 13
                MOTHER.  TAKE [RUNNING NOTES[ ON LANGUAGE USAGE.  1.  NOTE01349 14
                INDIVIDUAL LANGUAGE USAGE.  2.  NOTE USE OF DIALOGUE OR 01349 15
                INTERACTION WITH MOTHER.                                01349 16
*SETTING        INDEPENDENT  COMMUNITY                                  01349 10
*MATERIALS      A FAMILY SITUATION.                                     01349  5
*LEVEL          PRE-SCH,-K                                              01349  8
*GENERAL/       ALL CANDIDATES                                          01349  7
*HOURS          1 1/2                                                   01349  6
*EVALUATION     WRITE A SUMMARY OF TYPE OF LANGUAGE USED IN MIDDLE CLASS 01349 21
                HOMES:  LENGTH OF SENTENCES, NUMBER OF NOUNS, PRONOUNS, 01349 22
                MODIFYING WORDS.  ROLE OF MOTHER IN EXTENDING LANGUAGE  01349 23
                LEARNING.                                               01349 24
*FILE           FAMILY IMPACT ON CHILD  INTELLECTUAL DEV.  LANGUAGE DEV. 01349  9
```

```
*OBJECTIVES     TO MAKE STUDENT PERCEPTIVE IN HEARING DIFFERENCES IN    01350 17
                SPEECH PATTERNS.                                        01350 18
*PREREQUISITE HOW TO RUN A TAPE RECORDER+ HOW TO GET CHILDREN INTERESTED01350 19
                IN [PROPS[ TO ENCOURAGE CONVERSATION.                   01350 20
*EXPERIENCE     LISTEN TO AND RECORD SPEECH OF THREE FOUR YEAR OLD      01350 11
                CHILDREN FROM DIFFERENT SOCIO-ECONOMIC BACKGROUNDS.     01350 12
                COMPARE SPEECH AS TO:  1.  TOTAL NUMBER OF WORDS SPOKEN IN01350 13
                A GIVEN TIME.  2.  NUMBER OF DIFFERENT WORDS SPOKEN.  3.  01350 14
                LENGTH OF SENTENCE USED.  4.  SEX DIFFERENCES, IF ANY.  5.01350 15
                DIFFERENCES IN ARTICULATION.                            01350 16
*SETTING        COMMUNITY                                               01350 10
*MATERIALS      TAPE RECORDER+ TAPE+ PROPS FOR CHILDREN TO ENCOURAGE    01350  5
                INTERACTION AND PERHAPS LANGUAGE.                       01350
*LEVEL          PRE-SCH,-K                                              01350  8
*GENERAL        SPECIALIST                                              01350  7
*HOURS          1                                                       01350  6
*EVALUATION     IDENTIFY POSSIBLE REASONS FOR SIMILARITIES AND DIFFERENCES01350 21
                IN SPEECH PATTERS IN CHILDREN REPRESENTATIVE OF DIFFERENT 01350 22
                SOCIAL CLASSES.                                         01350 23
*FILE           INTELLECTUAL DEV.  LANGUAGE DEV.  PRESCHOOL-K           01350  9
```

```
*OBJECTIVES     TO OBSERVE THE NATURE OF EMOTIONAL BEHAVIOR OF YOUNG    01351 18
                CHILDREN.  TO OBSERVE INCREASING DIFFERENTIATION OF     01351 19
                EMOTIONS WITH INCREASING AGE.                           01351 20
*PREREQUISITE BACKGOUND READING IN THE NATURE OF EMOTIONAL DEVELOPMENT  01351 21
                IN YOUNG CHILDREN.                                      01351 22
*EXPERIENCE     DURING A ONE-HOUR OBSERVATION OF A GROUP OF PRESCHOOL   01351 11
                CHILDREN, RECORD A VARIETY OF EMOTIONAL STATES OBSERVED IN01351 12
                THE CHILDREN.  FOR EACH:  STATE THE AGE OF THE CHILD.   01351 13
                IDENTIFY, IF POSSIBLE, THE KIND OF FEELING BEING EXPRESSED01351 14
                SUCH AS FEAR, ANGER, JOY, AFFECTION, SYMPATHY, JEALOUSY, 01351 15
                ETC.  STATE STIMULUS WHICH APPARENTLY EVOKED THE EMOTION. 01351 16
                STATE THE MODE AND DURATION OF THE EXPRESSION.          01351 17
*SETTING        INDEPENDENT  COMMUNITY OR SCHOOL                        01351 10
*MATERIALS      BLANK                                                   01351  5
*LEVEL          PRE-SCH,-K                                              01351  8
*GENERAL        ALL CANDIDATES                                          01351  7
*HOURS          BLANK                                                   01351  6
*EVALUATION     SUMMARIZE THE NATURE OF EMOTIONAL EXPRESSION IN YOUNG   01351 23
                CHILDREN: TYPES AND VARIETY OF STIMULI, NATURE OF       01351 24
                RESPONSES, DIFFERENTIATION WITH INCREASING AGE OF CHILD. 01351 25

*FILE           PRESCHOOL CHILD  EMOTIONAL BEHAVIOR  DIFFERENTIATION    01351  9
```

```
*OBJECTIVES    TO BECOME AWARE OF WAYS IN WHICH A TRUSTED ADULT MAY HELP 01352 18
               A CHILD COPE WITH HIS EMOTIONS.                           01352 19
*PREREQUISITE  ABILITY TO OBSERVE SUBTLITIES OF BEHAVIOR.                01352 20
*EXPERIENCE    DURING A ONE-HOUR OBSERVATION IN A PRESCHOOL GROUP, RECORD01352 11
               INSTANCES IN WHICH THE TEACHER AIDED A CHILD IN COPING    01352 12
               WITH HIS FEELINGS.  WHAT DID SHE DO TO LESSEN THE         01352 13
               DISTRESSFUL ONES SUCH AS FEAR, JEALOUSY, ANGER^  WHAT DID 01352 14
               SHE DO TO HEIGHTEN THE PLEASURABLE ONES SUCH AS JOY,      01352 15
               AFFECTION, ETC.^  NOTE THE DEGREE OF EFFECTIVENESS IN EACH01352 16
               CASE.                                                     01352 17
*SETTING       INDEPENDENT  COMMUNITY OR SCHOOL                          01352 10
*MATERIALS     BLANK                                                     01352  5
*LEVEL         PRE-SCH.-K                                                01352  8
*GENERAL       ALL CANDIDATES                                            01352  7
*HOURS         1 1/2                                                     01352  6
*EVALUATION    WHICH MEANS WERE EFFECTIVE^  WHICH WERE NOT^  EXPLAIN, WHY01352 21
               YOU THINK THEY WERE OR WERE NOT EFFECTIVE.                01352 22
*FILE          PRESCHOOL CHILD  ADULT INTERACTIONS  EMOTIONS             01352  9
```

```
*OBJECTIVES    1.  TO EXTEND UNDERSTANDING OF SPONTANEOUS SOCIAL GROUPING01353 17
               OF YOUNG CHILDREN.  2.  TO BE ABLE TO MAKE PLANS WHICH ARE01353 18
               IN HARMONY WITH CHILD<S LEVEL OF DEVELOPMENT.             01353 19
*PREREQUISITE  KNOWLEDGE OF PARTENSS FINDINGS.  KNOWLEDGE OF MATERIALS   01353 20
               AND SPACE NEEDED FOR SOCIAL GROUP PLAY.                   01353 21
*EXPERIENCE    USING PARTENSS DATA ON SPONTANEOUS SOCIAL GROUPING OF     01353 11
               CHILDREN IN PLAY AS YOUR GUIDE, MAKE A PLAN AS TO HOW YOU 01353 12
               WOULD SET THE STAGE AND GIVE GUIDANCE AS NEEDED IN        01353 13
               PARALLEL PLAY+ SHIFTING GROUP PLAY+ AND ORGANIZED GROUP   01353 14
               PLAY ≥AT THE BEGINNING LEVELS AS SEEN BETWEEN 4-5 YR. OF  01353 15
               AGE+.                                                     01353 16
*SETTING       INDEPENDENT  COLLEGE                                      01353 10
*MATERIALS     BLANK                                                     01353  5
*LEVEL         PRE-SCH.-K                                                01353  8
*GENERAL       ALL CANDIDATES                                            01353  7
*HOURS         2                                                         01353  6
*EVALUATION    OPERATIONALIZE YOUR PLAN AND, WITH AID OF SUPERVISING     01353 22
               TEACHER, EVALUATE THE PLAN AND ITS EXECUTION.             01353 23
*FILE          PRESCHOOL CHILD  SOCIAL GROUPING-PARALLEL PLAY-  PLANNING 01353  9
               ACTIVITIES                                                01353
```

```
*OBJECTIVES    TO SEE IN ACTUAL SITUATIONS, THE LEVEL OF SOCIAL          01354 21
               INTERACTION OF PRESCHOOL CHILDREN WITH THEIR PEERS.       01354 22
*PREREQUISITE  BACKGROUND READING ≥AND LECTURES+ ON SOCIAL DEVELOPMENT   01354 23
               2-5 YEARS.                                                01354 24
*EXPERIENCE    OBSERVE FOR ONE HOUR INCIDENTS OF SOCIAL INTERACTION AMONG01354 11
               CHILDREN IN A PRESCHOOL GROUP.  E.G. QUARRELING OR OTHER  01354 12
               HOSTILE BEHAVIOR, COOPERATION, FRIENDSHIP, SYMPATHY,      01354 13
               DIFFERENTIATION OF RIGHT AND WRONG, RESPECTING PROPERTY   01354 14
               RIGHTS, TAKING TURNS, ETC.  RECORD AS GREAT A VARIETY OF  01354 15
               TYPES OF INTERACTION AS YOU OBSERVED.  IN EACH INCIDENT   01354 16
               FOCUS ON THE INSTIGATOR OF THE INTERACTION:  WHAT DID HE  01354 17
               DO TO INITIATE INTERACTION AND TO KEEP IT GOING^  WHAT    01354 18
               RESPONSE DID HE RECEIVE FROM OTHER CHILDREN^  HOW LONG DID01354 19
               THE INTERACTION CONTINUE^                                 01354 20
*SETTING       LARGE GROUP  INDEPENDENT  SCHOOL                          01354 10
*MATERIALS     THIS COULD BE DONE, USING A VIDEOTAPE OF THE SOCIAL       01354  5
```

```
                INTERACTION OF CHILDREN.                                01354
*LEVEL          PRE-SCH,-K                                              01354  8
*GENERAL        ALL CANDIDATES                                          01354  7
*HOURS          2                                                       01354  6
*EVALUATION     FROM YOUR OBSERVATION DATA SUMMARIZE OUTSTANDING        01354 25
                CHARACTERISTICS OF SOCIAL INTERACTION IN EACH SITUATION. 01354 26
                COMPARE WITH RESEARCH FINDINGS FOR THE PARTICULAR TYPE OF 01354 27
                SOCIAL INTERACTION UNDER CONSIDERATION.  GIVE PROBABLE  01354 28
                REASONS FOR DISCREPANCIES.                              01354 29
*FILE           PRESCHOOL CHILD  SOCIAL INTERACTION                     01354  9

*OBJECTIVES     TO HAVE EXPERIENCE IN HELPING CHILDREN DEVELOP POSITIVE 01355 19
                SOCIAL RELATIONS.                                       01355 20
*PREREQUISITE KNOWLEDGE OF CIRCUMSTANCES FAVORING POSITIVE SOCIAL       01355 21
                RELATIONS.  OBSERVATION OF A SKILLED TEACHER IN SIMILAR 01355 22
                SITUATION.                                              01355 23
*EXPERIENCE     PARTICIPATE AS AN ASSISTANT TEACHER, IN FREE PLAY       01355 11
                SITUATIONS IN WHICH CHILDREN ARE ENGAGED IN SOCIAL      01355 12
                INTERACTION WITH THEIR PEERS AND/OR ADULTS.  DO WHAT YOU 01355 13
                CONSIDER NECESSARY AND DESIRABLE TO PROMOTE POSITIVE    01355 14
                SOCIAL RELATIONS.  HAVE ANOTHER ADULT OBSERVE AND RECORD 01355 15
                YOUR BEHAVIOR OR HAVE YOUR PERFORMANCE VIDEO-TAPED.     01355 16
                EXAMINE THE RECORD WITH THE OBSERVER OR WITH A SMALL GROUP01355 17
                IF VIDEO TAPE CAN BE VIEWED BY THE GROUP.               01355 18
*SETTING        LARGE GROUP  INDEPENDENT  SCHOOL                        01355 10
*MATERIALS      BLANK                                                   01355  5
*LEVEL          PRE-SCH,-K                                              01355  8
*GENERAL        ALL CANDIDATES                                          01355  7
*HOURS          2                                                       01355  6
*EVALUATION     EVALUATE, WITH THE OBSERVER OR THE SMALL GROUP, YOUR    01355 24
                EFFECTIVENESS.  WHY DID YOU SUCCEED WHERE YOU DID+ FAIL 01355 25
                WHERE YOU DID^  WOULD YOU CHANGE^  HOW^                 01355 26
*FILE           PRESCHOOL CHILD  SOCIAL INTERACTIONS  FREE PLAY         01355  9

*OBJECTIVES     TO RECOGNIZE IN THE (BLUSTERY(, AGGRESSIVE BEHAVIOR OF  01356 18
                CHILDREN, A DEVELOPING ASPECT OF THE PERSONALITY -- A   01356 19
                SENSE OF INITIATIVE.  TO RECOGNIZE HOW TEACHER MAY AID OR 01356 20
                LIMIT SUCH DEVELOPMENT.                                 01356 21
*PREREQUISITE KNOWLEDGE OF WAYS IN WHICH A PRESCHOOL CHILD MAY GIVE     01356 22
                EVIDENCE OF A DEVELOPING SENSE OF INITIATIVE.           01356 23
*EXPERIENCE     DURING A ONE-HOUR OBSERVATION OF OLDER PRESCHOOL CHILDREN 01356 11
                ≥4 YEARS -, RECORD INSTANCES IN WHICH A CHILD APPEARS TO 01356 12
                BE EVIDENCING A DEVELOPING SENSE OF INITIATIVE.  IN EACH 01356 13
                INSTANCE RECORD:  WHAT THE CHILD WAS ATTEMPTING TO DO.  01356 14
                HOW HE WORKED AT IT.  IF HE INVOLVED OTHERS, HOW.  THE  01356 15
                RESULTS OF HIS EFFORTS.  TEACHER$S AID OR RESTRICTIONS  01356 16
                PLACED ON HIS EFFORTS.                                  01356 17
*SETTING        INDEPENDENT  SCHOOL                                     01356 10
*MATERIALS      BLANK                                                   01356  5
*LEVEL          PRE-SCH,-K                                              01356  8
*GENERAL        ALL CANDIDATES                                          01356  7
*HOURS          1 1/2                                                   01356  6
*EVALUATION     EXPLAIN THE KIND OF BEHAVIOR OBSERVED IN TERMS OF       01356 24
                ERICKSON$S CONCEPT OF PERSONALITY DEVELOPMENT.          01356 25
*FILE           PRESCHOOL CHILD  INITIATIVE  AGGRESSION                 01356  9

*OBJECTIVES     TO REALIZE THE VARIETY OF WAYS IN WHICH A TEACHER MAY   01357 19
                CONTRIBUTE TO SATISFACTORY PSYCHOLOGICAL DEVELOPMENT OF 01357 20
```

```
              CHILDREN.                                                  01357 21
*PREREQUISITE KNOWLEDGE OF RESEARCH FINDINGS IN THIS AREA:  SEARS,       01357 22
              RHEINGOLD:  ESCALONA+ GERVIRTZ+ IT ALL.                    01357 23
*EXPERIENCE   OBSERVE ONE HOUR IN A PRESCHOOL PROGRAM FOCUSING YOUR      01357 11
              OBSERVATION ON THE INTERACTION BETWEEN CHILDREN AND        01357 12
              TEACHER IN WHICH TEACHER CONTRIBUTES TO A CHILD≤S          01357 13
              PSYCHOLOGICAL NEEDS:  WARMTH, A SENSE OF TRUST, A SENSE OF01357 14
              AUTONOMY, A SENSE OF INITIATIVE.  RECORD CHILD≤S           01357 15
              EXPRESSION OF THE NEED ≥VERBAL OR NON-VERBAL*.  TEACHER≤S 01357 16
              WAY OF MEETING THE CHILD≤S NEED.  CHILD≤S RESPONSE TO THE 01357 17
              TEACHER≤S EFFORTS.                                         01357 18
*SETTING      INDEPENDENT  SCHOOL                                        01357 10
*MATERIALS    TEACHER AND CHILDREN IN A PRESCHOOL PROGRAM.               01357  5
*LEVEL        PRE-SCH.-K                                                 01357  8
*GENERAL      ALL CANDIDATES                                             01357  7
*HOURS        2                                                          01357  6
*EVALUATION   COMPARE YOUR OBSERVATION DATA WITH FINDINGS OF RESEARCHERS01357 24
              IN THE AREA OF PSYCHOLOGICAL NEEDS OF YOUNG CHILDREN.      01357 25
*FILE         PRESCHOOL CHILD  TEACHER INFLUENCE ON PSYCH. DEV.          01357  9
              OBSERVATION                                                01357
```

```
*OBJECTIVES   TO REINFORCE TEXTBOOK KNOWLEDGE OF CHILDREN≤S PLAY.        01358 19
*PREREQUISITE THEORETICAL KNOWLEDGE OF ROLE OF PLAY IN CHILDREN≤S        01358 20
              DEVELOPMENT.  TEACHER MAY ASSIGN TEXTBOOK READINGS.        01358 21
*EXPERIENCE   VIEW FILM [YOUR CHILDREN≤S PLAY[ ≥UNIV. OF ILLINOIS - 20  01358 11
              MINUTES*.  DISCUSS:  1. HOW CHILDREN LEARN BY PLAYING.     01358 12
              2. WHAT KINDS OF KNOWLEDGE ARE ACQUIRED THROUGH PLAY.      01358 13
              3. PHYSICAL DEXTERITY OF CHILDREN AT DIFFERENT AGE LEVELS.01358 14
              --DURING PLAY.  4. HOW PLAY ACTIVITIES SEEM TO CHANNEL     01358 15
              CHILDREN≤S EMOTIONAL STATES.  5. HOW PLAY ACTS AS A        01358 16
              SOCIALIZING FORCE ON CHILDREN.  6. ROLE OF ADULT ATTITUDES01358 17
              TOWARD PLAY.                                               01358 18
*SETTING      LARGE GROUP  COLLEGE                                       01358 10
*MATERIALS    FILM:  YOUR CHILDREN≤S PLAY+ UNIV. OF ILL.                 01358  5
*LEVEL        PRE-SCH.-K                                                 01358  8
*GENERAL      ALL CANDIDATES                                             01358  7
*HOURS        1                                                          01358  6
*EVALUATION   FROM YOUR EXPERIENCES, CITE SPECIFIC CASE EXAMPLES OF PLAY01358 22
              THAT ILLUSTRATE INTELLECTUAL, SOCIAL, EMOTIONAL, AND       01358 23
              PHYSICAL DEVELOPMENT OF CHILDREN AT VARIOUS AGE LEVELS     01358 24
              ≥2 TO 6 YEARS*                                             01358 25
*FILE         PRESCHOOL CHILD  ROLE OF PLAY  PRESCHOOL -K                01358  9
```

```
*OBJECTIVES   TO BECOME AWARE OF SOCIAL RELATIONSHIPS IN PLAY.           01359 19
*PREREQUISITE ABILITY TO TAKE [RUNNING NOTES[ QUICKLY OF ALL ACTIVITY    01359 20
              OBSERVED.                                                  01359 21
*EXPERIENCE   WORK IN TEAMS OF FOUR.  SELECT A NURSERY SCHOOL CLASS OF   01359 11
              3 YEAR OLDS.  TASK IS TO OBSERVE THE VARIETIES OF          01359 12
              SPONTANEOUS [FREE PLAY[ ACTIVITIES.  ONE STUDENT OBSERVES 01359 13
              ACTIVITY IN [PAINT OR ART CENTER[, ONE IN [BLOCK CORNER[, 01359 14
              ONE IN [HOUSE-KEEPING CORNER[, ONE IN ANY OTHER SPECIAL    01359 15
              ACTIVITY OF THE DAY ON WHICH CHILDREN HAVE FOCUSED THEIR   01359 16
              INTEREST.  TAKE RUNNING NOTES OF ALL ACTIVITY IN YOUR      01359 17
              AREA:  INDIVIDUAL AS WELL AS SOCIAL.                       01359 18
*SETTING      SMALL GROUP ≥1-12 STUDENTS*  SCHOOL                        01359 10
*MATERIALS    NURSERY SCHOOL+ THREE YEAR OLD GROUP                       01359  5
*LEVEL        PRE-SCH.-K                                                 01359  8
*GENERAL      SPECIALIST                                                 01359  7
*HOURS        1                                                          01359  6
```

```
*EVALUATION    WRITE UP NOTES TO BE USED AS DATA FOR THE FOLLOWING        01359 22
               MODULES,                                                    01359 23
*FILE          PRESCHOOL CHILD  ROLE OF PLAY  PRESCHOOL -K                 01359  9
```

```
*OBJECTIVES    AWARENESS OF HOW PHYSICAL-MOTOR DEVELOPMENT IS ENHANCED     01360 20
               THROUGH PLAY.  TO CHECK EFFICACY OF OBSERVATIONS OF         01360 21
               CHILDREN AT PLAY.                                           01360 22
*PREREQUISITE SAME AS MODULE 1328                                          01360 23
*EXPERIENCE    USING DATA FROM OBSERVATIONS OF MODULE 1328 CITE SPECIFIC   01360 11
               EXAMPLES OF PHYSICAL-MOTOR DEVELOPMENT THROUGH PLAY.        01360 12
               1. INDICATE AGE LEVEL OF CHILD.  2. CITE EXAMPLES OF        01360 13
               [COMPETENCE[ IN PLAY THAT SEEMS TO ENHANCE THE              01360 14
               SELF-CONCEPT OF A CHILD.  ANY EXAMPLES OF THE REVERSE^      01360 15
               3, GIVE EXAMPLES OF EXPERIMENTATION, INVENTION, DISCOVERY   01360 16
               OF CHILD≤S PHYSICAL-MOTOR INTERACTION WITH HIS              01360 17
               ENVIRONMENT, IF POSSIBLE.  4. CHOICE OF EQUIPMENT^          01360 18
               VARIETY OF USE^                                             01360 19
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COMMUNITY  OR SCHOOL           01360 10
*MATERIALS     BLANK                                                       01360  5
*LEVEL         PRE-SCH,-K                                                  01360  8
*GENERAL       SPECIALIST                                                  01360  7
*HOURS         1/2                                                         01360  6
*EVALUATION    IN LIGHT OF OBSERVATIONS, WHAT TYPES OF EQUIPMENT CAN YOU   01360 24
               SUGGEST TO ENHANCE PHYSICAL-MOTOR DEVELOPMENT OF YOUNG      01360 25
               PRESCHOOL CHILD.                                            01360 26
*FILE          PHYSICAL-MOTOR DEVELOPMENT  ROLE OF PLAY  PRESCHOOL-K       01360  9
```

```
*OBJECTIVES    TO BE ABLE TO RECOGNIZE THE MANY FACETED FUNCTIONS OF PLAY01361 16
               IN THE LIVES OF YOUNG CHILDREN.                             01361 17
*PREREQUISITE GENERAL KNOWLEDGE OF FUNCTIONS OF PLAY AS INTERPRETED BY     01361 18
               PROFESSIONALS IN THE FIELD OF CHILD DEVELOPMENT AND         01361 19
               RELATED DISCIPLINES.  INSTRUCTOR MAY MAKE TEXTBOOK          01361 20
               ASSIGNMENTS, IF DESIRED.                                    01361 21
*EXPERIENCE    USING DATA FROM PREVIOUS MODULE 1326, CITE EXAMPLES THAT    01361 11
               ILLUSTRATE EACH FUNCTION OF PLAY AS INDICATED IN COURSE     01361 12
               OUTLINE.  EX:  [CHILD USES PLAY FOR ≤DIRECT, NONVERBAL      01361 13
               MODES OF COMMUNICATIONS.  ≥ERIKSON↑.  THEN, IF POSSIBLE,    01361 14
               CITE EXAMPLE TO ILLUSTRATE THIS FROM OBSERVATION DATA.      01361 15
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                        01361 10
*MATERIALS     BLANK                                                       01361  5
*LEVEL         PRE-SCH,-K                                                  01361  8
*GENERAL       SPECIALIST                                                  01361  7
*HOURS         1                                                           01361  6
*EVALUATION    PRESENT A GROUP REPORT TO WHOLE CLASS+ DEMONSTRATE ABILITY01361 22
               TO ILLUSTRATE WITH EXAMPLES AND INTERPRETATION OF THE       01361 23
               FUNCTIONS OF PLAY FOR YOUNG CHILDREN AT VARIOUS AGES ≥TWO   01361 24
               TO SIX YEARS↑                                               01361 25
*FILE          PRESCHOOL CHILD  ROLE OF PLAY  PRESCHOOL-K                  01361  9
```

```
*OBJECTIVES    OBSERVATION AND AWARENESS OF THE INTELLECTUAL COMPONENT IN01362 16
               CHILDREN≤S PLAY.                                            01362 17
*PREREQUISITE BLANK                                                        01362 18
*EXPERIENCE    VISIT A GROUP OF FOUR YEAR OLDS AT PLAY, EITHER IN SCHOOL   01362 11
               OR IN INFORMAL PLAY GROUPINGS.  NOTE EXAMPLES OF            01362 12
               INTELLECTUAL FUNCTIONING IN PLAY ≥USE OF LANGUAGE AND       01362 13
               COMMUNICATION, PROBLEM SOLVING, PUZZLES AND GAMES,          01362 14
               CREATIVITY AND IMAGINATION, ETC.↑.                          01362 15
*SETTING       INDEPENDENT  COMMUNITY  OR SCHOOL                           01362 10
```

```
*MATERIALS      FOUR YEAR OLD CHILDREN AT PLAY                         01362  5
*LEVEL          PRE-SCH.-K                                             01362  8
*GENERAL        SPECIALIST                                             01362  7
*HOURS          1/2                                                    01362  6
*EVALUATION     CREATE A LIST OF SUGGESTIVE PLAY EXPERIENCES TO FOSTER 01362 19
                INTELLECTUAL DEVELOPMENT IN YOUNG CHILDREN.            01362 20
*FILE           INTELL. DEV.  ROLE OF PLAY  PRESCHOOL - K              01362  9

*OBJECTIVES     TO BECOME SENSITIVE TO, AND BE ABLE TO HYPOTHESIZE FROM,  01363 23
                INTERPERSONAL RELATIONSHIPS BETWEEN PARENTS AND CHILDREN. 01363 24
*PREREQUISITE   SOME TEXTBOOK READING ON THE [IMPACT OF THE FAMILY ON THE 01363 25
                CHILD[.                                                   01363 26
*EXPERIENCE     EACH STUDENT WILL SEARCH OUT VIGNETTES OF FAMILY-CHILD    01363 11
                RELATIONSHIPS IN ILLUSTRATION OF TEXTBOOK MATERIAL ON     01363 12
                [IMPACT OF THE FAMILY ON THE CHILD[.  EACH STUDENT WILL   01363 13
                KEEP A [CHECK LIST[ RECORDING OBSERVATIONS AND [COMMENTS[.01363 14
                AN ATTEMPT SHOULD BE MADE, IF POSSIBLE, TO OBSERVE IN     01363 15
                HOMES REPRESENTING DIFFERENT SOCIAL CLASS LEVELS INCLUDING01363 16
                THE SOCIO-ECONOMICALLY DISADVANTAGED OF DIFFERENT ETHNIC  01363 17
                ORIGINS.  EXAMPLES:  OBSERVE NATURE OF COMMUNICATION      01363 18
                BETWEEN PARENT AND CHILD+ METHOD OF DISCIPLINE EXHIBITED+ 01363 19
                NOTE EXAMPLES OF ACCEPTANCE OR REJECTION OF CHILDSS IDEAS+01363 20
                ENCOURAGEMENT OF CREATIVITY OR INDEPENDENCE OR THE        01363 21
                REVERSE, ETC., ETC.                                       01363 22
*SETTING        INDEPENDENT  COLLEGE                                      01363 10
*MATERIALS      BLANK                                                     01363  5
*LEVEL          ALL GRADES                                                01363  8
*GENERAL        ALL CANDIDATES                                            01363  7
*HOURS          VARIABLE                                                  01363  6
*EVALUATION     DISCUSS AND EVALUATE WITH CLASS WHAT INSIGHTS WERE GAINED 01363 27
                FROM EXPERIENCES.  HYPOTHESIZE WHAT CHILDSS PATTERN OF    01363 28
                DEVELOPMENT MIGHT BE.                                     01363 29
*FILE           COMMUNICATION  IMPACT OF FAMILY  INTERPERSONAL            01363  9
                RELATIONSHIPS                                             01363

*OBJECTIVES     TO MAKE COMPARISONS OF THE USE OF LANGUAGE AT DIFFERENT   01364 25
                SOCIAL CLASS LEVELS.                                      01364 26
*PREREQUISITE   KNOWLEDGE OF BERNSTEINSSS CONCEPT OF [ELABORATE[ AND      01364 27
                [RESTRICTED[ CODE OF LANGUAGE                             01364 28
*EXPERIENCE     USING DATA FROM MODULE 1349, WRITE A COMPARATIVE REPORT OF01364 11
                LANGUAGE PATTERNS AT THE DIFFERENT SOCIO-ECONOMIC LEVELS. 01364 12
                PRESENT REPORT TO THE WHOLE CLASS.  ANSWER THE FOLLOWING  01364 13
                QUESTIONS AS A GUIDE:  1. AMOUNT OF CONVERSATION BETWEEN  01364 14
                MOTHER AND CHILD/CHILDREN.  2. WAS CONVERSATION UNILATERAL01364 15
                BETWEEN MOTHER AND CHILD/CHILDREN^  3. DID MOTHER         01364 16
                GENERALLY ANSWER CHILD/CHILDRENSS QUESTIONS^  DID CHILD   01364 17
                ASK ANY^  4. DID MOTHER ANSWER IN [ELABORATE[ OR          01364 18
                [RESTRICTED[ CODE OF LANGUAGE^  5. COULD QUALITY OF       01364 19
                MOTHER-CHILD RELATIONSHIP BE DETERMINED= WARM, COLD+      01364 20
                AUTHORITARIAN PERMISSIVE, ETC.  6. DOES MOTHER LISTEN TO  01364 21
                WHAT CHILD SAYS^  7. WHO INITIATES CONVERSATION-CHILD OR  01364 22
                MOTHER^  NUMBER OF TIMES EACH WAY.  8. DOES MOTHER CLARIFY01364 23
                CONCEPTS OF CHILD BY LABELLING, CLASSIFYING^              01364 24
*SETTING        LARGE GROUP  COLLEGE                                      01364 10
*MATERIALS      BLANK                                                     01364  5
*LEVEL          PRE-SCH.-K                                                01364  8
*GENERAL        ALL CANDIDATES                                            01364  7
*HOURS         2                                                          01364  6
*EVALUATION     DISCUSS WHAT ARE IMPLICATIONS OF THIS INFORMATION ON      01364 29
```

```
               TEACHER≤S UNDERSTANDING OF CHILD, AND HER EXPECTATIONS FOR01364 30
               HIS PERFORMANCE IN LANGUAGE ACTIVITIES.                     01364 31
*FILE          IMPACT OF FAMILY  INTELLECTUAL DEV.  LANGUAGE               01364  9

*OBJECTIVES    TOWARD GAINING UNDERSTANDING OF INTERPERSONAL               01365 15
               RELATIONSHIPS IN THE FAMILY.  IMPACT OF THESE ON THE        01365 16
               DEVELOPING CHILD.                                           01365 17
*PREREQUISITE  BLANK                                                       01365 18
*EXPERIENCE    READ A PLAY OR A NOVEL DEPICTING FAMILY LIFE.  FOR THOSE    01365 11
               INTERESTED, CHOOSE ONE FROM A LIST ILLUSTRATING LIFE AMONG01365 12
               ETHNIC GROUPS, OR THE DISADVANTAGED, OR THE GHETTO OF THE  01365 13
               NEGRO FAMILY.                                               01365 14
*SETTING       INDEPENDENT  COLLEGE                                        01365 10
*MATERIALS     BIBLIOGRAPHY OF FICTION IN THE FIELD OF THE FAMILY          01365  5
*LEVEL         ALL GRADES                                                  01365  8
*GENERAL       ALL CANDIDATES                                              01365  7
*HOURS         VARIABLE                                                    01365  6
*EVALUATION    WRITE A REPORT INDICATING HOW BOOK HAS ADDED INSIGHT INTO  01365 19
               THE IMPACT OF THE FAMILY ON THE DEVELOPMENT OF THE          01365 20
               CHILDREN.  IMPLICATIONS FOR TEACHERS.                       01365 21
*FILE          IMPACT OF FAMILY  INTERPERSONAL RELATIONS                   01365  9

*OBJECTIVES    TOWARD UNDERSTANDING HOW THE DEPRIVED SEGMENT OF OUR        01366 14
               NATION LIVE.                                                01366 15
*PREREQUISITE  BLANK                                                       01366 16
*EXPERIENCE    VIEW FILM:  [IMPACT OF DEPRIVATION ON YOUNG CHILDREN[,     01366 11
               COMMENTARY BY BARBARA BIBER, PH.D.  DISCUSS IMPLICATIONS   01366 12
               FOR TEACHERS AND CURRICULUM.  RELEVANT TO YOUNG CHILDREN.  01366 13
*SETTING       LARGE GROUP  DISCUSSION WITH SMALLER GROUPS  COLLEGE        01366 10
*MATERIALS     FILM LISTED ABOVE.                                          01366  5
*LEVEL         ALL GRADES                                                  01366  8
*GENERAL       ALL CANDIDATES                                              01366  7
*HOURS         3/4                                                         01366  6
*EVALUATION    ANSWER:  WHAT ARE THE RESULTS OF DEPRIVATION ON YOUNG       01366 17
               CHILDREN^                                                   01366 18
*FILE          PRE-SCHOOL DISADVANTAGED  SOCIO-ECONOMICALLY DEPRIVED       01366  9
               ROLE OF FAMILY                                              01366

*OBJECTIVES    1. TO SHARPEN OBSERVATION POWERS IN ASSESSING CHILDREN≤S   01367 16
               BEHAVIOR ≥PRESCHOOL YEARS+  2. TO OBSERVE WAYS IN WHICH    01367 17
               SOCIAL CLASS DIFFERENCES MANIFEST THEMSELVES IN CHILDREN.  01367 18
*PREREQUISITE  EXPERIENCES IN OBSERVING CHILDREN                           01367 19
*EXPERIENCE    VISIT A HEAD START PREKINDERGARTEN GROUP ≥4-6 YEARS OF     01367 11
               AGE+.  USING THE LIST OF [TRAITS[ ON PAGE 3 OF COURSE       01367 12
               OUTLINE, CITE INSTANCES, IF POSSIBLE, THAT COULD BE         01367 13
               ILLUSTRATIVE OF THE BEHAVIORAL TRAITS OF THE DISADVANTAGED01367 14
               CHILD AS COMPARED TO THE MIDDLE CLASS CHILD.                01367 15
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COMMUNITY                      01367 10
*MATERIALS     [HEAD START[ GROUP FORMED USING THE CRITERIA OF THE OFFICE01367  5
               OF ECONOMIC OPPORTUNITY                                     01367
*LEVEL         PRE-SCH.-K                                                  01367  8
*GENERAL       ALL CANDIDATES                                              01367  7
*HOURS         2                                                           01367  6
*EVALUATION    AS A RESULT OF OBSERVING THE DISADVANTAGED CHILDREN≤S       01367 20
               BEHAVIOR, DISCUSS HOW THE SCHOOL CURRICULUM BE MORE         01367 21
               MEANINGFUL FOR THESE CHILDREN.                              01367 22
*FILE          PRESCHOOL DISADVANTAGED  BEHAVIORAL TRAITS  OBSERVATION     01367  9
```

```
*OBJECTIVES    TO SEE DEMONSTRATED LANGUAGE PATTERNS IN A LOWER CLASS      01368 13
               DISADVANTAGED HOME.                                         01368 14
*PREREQUISITE SAME AS PREVIOUS MODULE 1349                                 01368 15
*EXPERIENCE    USE SAME EXPERIENCE AS PREVIOUS MODULE 1349 EXCEPT USE THE01368 11
               SETTING OF A LOWER CLASS [DISADVANTAGED[ HOME.              01368 12
*SETTING       BLANK  COMMUNITY                                            01368 10
*MATERIALS     BLANK                                                       01368  5
*LEVEL         PRE-SCH.-K                                                  01368  8
*GENERAL       ALL CANDIDATES                                              01368  7
*HOURS         1 1/2                                                       01368  6
*EVALUATION    SAME AS PREVIOUS MODULE USING DATA FOJND IN THIS            01368 16
               EXPERIENCE.                                                 01368 17
*FILE          PRESCHOOL DISADVANTAGED  LANGUAGE PATTERNS  LOWER           01368  9
               SOCIO-ECONOMIC LEVE.                                        01368
```

```
*OBJECTIVES    TO SEE ASPECTS OF THE LEVEL OF PHYSICAL AND MOTOR           01369 16
               DEVELOPMENT OF A CHILD AT BIRTH AND TO REALIZE THE VARIETY01369 17
               OF REFLEX RESPONSES.                                        01369 18
*PREREQUISITE KNOWLEDGE OF PHYSICAL AND MOTOR DEVELOPMENT OF NEWBORNS      01369 19
               GAINED FROM LECTURES AND READINGS FAMILIARITY WITH          01369 20
               APPEARANCE OF INFANTS 6-12 MO.                              01369 21
*EXPERIENCE    VIEW FILM [NEUROLOGICAL EXAMINATION OF THE NEWBORN[,        01369 11
               NOTING GENERAL APPEARANCE OF INFANTS -- E.G. BODY           01369 12
               PROPORTIONS, POSTURE, COLOR OF SKIN, EYES, HAIR -- AND      01369 13
               SPONTANEOUS REFLEX ACTIVITY.  ≥STIMILI AND RESPONSES FOR A01369 14
               VARIETY OF REFLEX BEHAVIOR ARE DEMONSTRATED IN THE FILM.↑ 01369 15
*SETTING       LARGE GROUP  COLLEGE                                        01369 10
*MATERIALS     FILM [NEUROLOGICAL EXAMINATION OF NEWBORN[ PREPARED BY      01369  5
               HENRY FORD HOSPITAL.                                        01369
*LEVEL         PRE-SCH.-K                                                  01369  8
*GENERAL       ALL CANDIDATES                                              01369  7
*HOURS         1                                                           01369  6
*EVALUATION    SUMMARIZE WAYS IN WHICH THE PHYSICAL APPEARANCE AND MOTOR 01369 22
               BEHAVIOR OF NEWBORNS OBSERVED IN FILM DIFFERS FROM THAT OF01369 23
               OLDER INFANTS ≥6-12 MO.↑ WHOM YOU≤VE SEEN.                  01369 24
*FILE          INFANCY  MOTOR DEVELOPMENT  BIRTH MEASUREMENTS              01369  9
```

BEHAVIORAL SCIENCE RESEARCH BASED STUDY

FOCUSED UPON EDUCATIONAL PSYCHOLOGY

Table of Contents

I. GENERAL OBJECTIVES FOR A COURSE IN EDUCATIONAL PSYCHOLOGY VII-78

- A. Functional Information and Understanding VII-78
- B. Skills and Abilities VII-78
- C. Attitudes, Interests, and Appreciations VII-79

II. THE PSYCHOLOGY OF TEACHING, LEARNING, AND INSTRUCTIONAL PROCESSES VII-79

- A. Psychological Models of Teaching Behavior VII-79
- B. Research Substantiated Conclusions About the Characteristics of "Good" Teaching VII-80
- C. Role of the Teacher in Presenting Lessons VII-81
- D. Techniques and Strategies of Presentation to Enhance Teaching VII-81
- E. Range of Possible Instructional and Administrative Roles VII-82
- F. Teaching and Innovations in Instruction VII-82

III. THE PSYCHOLOGY OF LEARNING AND LEARNING PROCESSES VII-83

- A. Learning is a Process Not a Product VII-83
- B. Seven Basic Steps Involved in the Learning Process . . VII-83
- C. Products of Learning, or Changes in Specific Ways of Behaving VII-83
- D. Basic Characteristics of Learning VII-84
- E. Techniques and Strategies to Enhance Learning VII-84
- F. Research Conclusions Related to the Use of Positive Reinforcement in Learning VII-85
- G. Research Conclusions Related to the Use of Negative Reinforcement in Learning VII-86
- H. Goals and Aspirations as Related to Learning VII-86
- I. The Learning of Skills VII-88
- J. Higher Mental Processes as Related to Learning VII-89
- K. Memory and Retention as Related to Learning VII-90
- L. Transfer of Training as Related to Learning VII-91
- M. Motivation, Motivational Processes, and Needs as Related to Learning VII-91
- N. Special Difficulties Influencing Learning VII-93

IV. THE EVALUATION OF LEARNING VII-94

A. Functions of Evaluation VII-94
B. Characteristics of a Good Evaluation Program VII-95
C. Types of Teacher-made Evaluation Instruments VII-95
D. Types of Standardized Tests VII-95
E. Characteristics of a Good Test VII-95
F. Research and Experts' Conclusions Related to the Evaluation and Measurement of Learning VII-95

V. THE CHILD AS A DEVELOPING ORGANISM VII-96

A. Basic Principles of Growth and Development VII-96
B. Approaches to Understanding and Studying Growth and Development VII-97
C. Physical Growth and Motor Development VII-99
D. Growth and Changes It Produces VII-100
E. General Research Conclusions Related to Growth and Development VII-101
F. Basic Principles of Emotional-Social Factors Involved in Growth and Development VII-102
G. Impact of the Family and Child-Rearing Practices on the Developing Child VII-105
H. The Growth and Development of Attitudes VII-109
I. Research Conclusions Related to How Attitudes Are Developed VII-109
J. Generalizations from Research Related to How Attitudes Can Be Changed and Modified VII-110
K. The Measurement and Nature of Intellectual Development and Creativity VII-111
L. Self-Concept: Its Nature and Nurture VII-115

VI. THE PSYCHOLOGY AND EDUCATION OF THE CULTURALLY DISADVANTAGED VII-121

A. Census Estimates (1960) of the Population by Social Class VII-121
B. General Characteristics of Disadvantaged Areas VII-122
C. Research Conclusions Related to the Social, Psychological, and Academic Characteristics of the Culturally Disadvantaged VII-122
D. Research Conclusions Related to Language Patterns of Disadvantaged Children VII-122
E. Research Conclusions Related to Learning Patterns of Disadvantaged Children VII-123
F. Research Conclusions Related to Readiness for Instruction of Disadvantaged Children VII-123

G. Guide lines in Instructional Approaches for the Disadvantaged VII-124
H. Summary of Research Conclusions Regarding Specific Practices Found to Be Most Effective Teaching the Disadvantaged VII-124

VII. MENTAL HEALTH IN THE CLASSROOM VII-125

A. Extent of the Mental Health Problem Among Elementary Students VII-125
B. Factors Having a Direct Bearing on the Mental Health of School Children VII-125
C. Five General Behavioral Patterns Indicative of Possible Maladjustment VII-126
D. Specific Behavioral Patterns Symptomatic of Possible Maladjustment VII-126
E. Criteria for Deciding Which Children to Study VII-126
F. Considerations Regarding Classroom Discipline VII-127
G. Techniques for Studying Individual Students VII-129
H. Research Conclusions Related to Group Life and Classroom Discipline VII-129
I. Research Conclusions Related to the Mental Health of Teachers VII-130
J. Mental Health and Teaching: Summary Research Conclusions VII-131

BEHAVIORAL SCIENCE RESEARCH BASED STUDY

FOCUSED UPON EDUCATIONAL PSYCHOLOGY

I. GENERAL OBJECTIVES FOR A COURSE IN EDUCATIONAL PSYCHOLOGY

Note: Although different instructors are likely to have a different order or emphasis of specific objectives, we can probably agree that the promotion of such objectives as insight into the dynamics of human behavior, into principle of growth and development and into the psychology of human learning are important. Even though the exact formulation and relative emphasis may vary, the following general objectives for an educational psychology course would probably be agreed on by most.

A. Functional Information and Understanding.

1. Insight into the psychodynamics of human behavior, including one's own dynamics as a prerequisite to understanding students.
2. Insight into the full meaning of the principles of educational psychology not as rules to be committed to memory but as tools for being a more effective teacher.
3. Understanding of the various aspects of growth and development in their interrelationships and an understanding of the implications of environmental influences on growth and development.
4. Familiarity with technical vocabulary, leading to increased ability to understand the professional literature, to communicate with other members of the profession, and to reason more effectively concerning professional problems by virtue of improved language tools.

B. Skills and Abilities.

1. Ability to integrate the facts and principles of educational psychology into a functional program at the performance level, thereby leading to a gradual increase in the proficiency of the prospective teacher in implementing his learning into effective techniques for dealing with students and co-workers.
2. Ability to inspire students to their best effort by relating desirable goals to their purposes and needs and by translating curricular content into realistic and challenging opportunities for growth.
3. Ability to create and maintain a classroom atmosphere conducive to maximum self-realization for both his pupils and himself.

4. Ability to coordinate the efforts of the school with the principles of maturation in order to promote the maximum student growth.
5. Skill in the selection, construction, and/or utilization of whatever instruments and techniques are appropriate for the appraisal and understanding of the student and his all-round growth.
6. Skill and interest in reading the professional literature as a means of maintaining professional growth, thereby leading to ever-increasing effectiveness in teaching.

C. Attitudes, Interests, and Appreciations.

1. An appreciation of each student as a growing organism coupled with a deep conviction of his worth and dignity and an unlimited faith in his capacity for growth.
2. An appreciation of the uniqueness of the individual and a willingness to make whatever adaptation in curriculum and methodology seems called for in "his best interest."
3. A sense of responsibility for the all-round growth of each student and an appreciation of the effect of various educational influences--including the teacher's own personality--in promoting or impeding such growth.
4. Pride in the teaching profession and dedication to the principle that "the student comes first."
5. An attitude of professional alertness leading to a constant quest for better ways of serving students and to a refusal to be guided by routine and expediency at the expense of their welfare.
6. An increased interest in the psychology of human behavior and its application to the classroom.
7. A critical and open-minded attitude toward methodology and an appreciation of the role of research in the improvement of education.

II. THE PSYCHOLOGY OF TEACHING, LEARNING, AND INSTRUCTIONAL PROCESSES

A. Psychological Models of Teaching Behavior.

1. The teacher as decision-maker model: (F. J. McDonald)
   a. The teaching strategy is basically a set of decisions made by the teacher designed to achieve goals, which are predetermined behavior changes in students.
   b. Three components to this model:
      (1) teacher selects among alternatives for behavior.
      (2) considers the consequences.
      (3) estimates the probability that a particular consequence will occur.
   c. With this model decisions and teaching plans are hypotheses about what may produce the best and most efficient learning.
2. The teacher as a social-interaction model: (N. Flanders)
   a. The teaching process is focused primarily on the type and nature of interaction between teacher and student.

b. Types of interactions:
   (1) teacher talk--indirect influence, e.g.,
      (a) accepts and clarifies students' feelings.
      (b) praises and encourages.
      (c) accepts and uses students' ideas.
      (d) asks questions.
   (2) teacher talk--direct influence, e.g.,
      (a) lectures, shows, tells.
      (b) gives directions, commands, orders.
      (c) criticizes or justifies authority.
   (3) student talk--in response to teacher.
   (4) student talk--self-initiated.

c. Directness or indirectness of teacher's influence affects two aspects of learning: student's dependence and learning.

3. The teacher as a personal-developmental model: (Combs and Snygg)
   a. The basic aim of the teacher is to give each student the opportunity to think for himself as a responsible and contributing member of the classroom in order to encourage the growth of self-esteem through the discovery of his talents and strength.
   b. Effective teaching requires the sensitive use of the teacher's personality as an instrument for assisting students to new experiences and discoveries.
   c. Teaching is a highly unique and individual matter, the purpose of which is to free students rather than control them through manipulation of extrinsic conditions such as rewards and punishments.
   d. The effective teacher recognizes that lasting behavior changes or learning reflect changes in the way students perceive themselves and their world.

B. Research Substantiated Conclusions About the Characteristics of "Good" Teaching.

1. Willingness to be flexible, to be direct or indirect as the situation demands.
2. Capacity to see the world from the student's point of view.
3. Ability to "personalize" teaching.
4. Willingness to experiment, to try out new things.
5. Skill in asking questions (as opposed to simply answering questions.)
6. Knowledge of subject matter and related areas.
7. Skill in establishing definite examination procedures.
8. Willingness to provide definite study guides.
9. Capacity to reflect and appreciate attitude.
10. Sensitivity to and knowledge about his own personal dynamics.
11. Sensitive to both verbal and nonverbal student cues.
12. Knowledge about and capacity to use findings from group dynamics research.
13. Conversational manner in teaching, i.e., informal, easy style.
14. Capacity to understand and use in everyday teaching practices those research findings relevant to individual differences in intellectual, physical, emotional, and social growth.

15. In addition, D. G. Ryans found that good teachers more frequently than poor teachers:
    a. indicate strong interest in reading and literary matters.
    b. indicate interest in music, painting, and the arts in general.
    c. judge selves high in ambition and initiative.
    d. have better pupil relationships--i.e., more favorable student opinions.
    e. are superior in verbal intelligence.
    f. have better emotional adjustment.

C. Role of the Teacher in Presenting Lessons.

1. Help establish realistic, reasonable, and socially acceptable goals.
2. Assist in choice of adequate procedures for reaching goals.
3. Offer support and constructive criticism when learner is facing difficult problems.
4. Supervise and evaluate the work of each student as an on-going process.
5. Assign tasks according to the maturation and ability of each student.
6. Offer all the technical assistance possible--i.e., films, records, books, etc.

D. Techniques and Strategies of Presentation to Enhance Teaching.

1. Language of the teacher should be no more complex than subject matter requires.
2. Adequate explanation or introduction of new material should precede the learner's exposure to it--e.g., students will get more from a film if they know first what to look for.
3. Teacher should be aware of relatively short attention span of younger elementary age students.
4. The use of as many sense organs as possible increases both the rate of learning and duration of attention.
5. Pointing out relationships, particularly between old and new experiences, assists learning.
6. Presentation of the overall picture helps students to integrate their learnings.
7. Emphasizing, reinforcing, and highlighting important aspects of new material should be done in a variety of ways--e.g., voice modulation, arrangement of material, listing on blackboard, etc.
8. Student feedback should be encouraged as much as possible in order to modify presentations as necessary.
9. Relating new learning to a student's own life will enhance ego-involvement and encourage motivation.
10. The use of group discussion and lecture presentations are more effective than when just one or the other are used exclusively.
11. Redundant language which involves the restatement of the idea in different terms makes spoken communication more effective than repetition of same words.

12. The inductive method of instruction, which involves the examination of specific examples from which generalizations can be drawn, is a superior technique for showing cause and effect relationships.
13. Teaching in a way which encourages learning by doing encourages
    a. more permanent learning.
    b. greater satisfaction of achievement motive.
    c. more ego-involvement.
14. Role-playing is most useful in teaching attitudes and understanding other people.
15. The construction of new concepts and the reconstruction of new concepts already held is an important way to help students organize experiences into meaningful categories.
16. Independent study should be encouraged in order to assist students to seek answers to their own questions.
17. Programmed instruction is most useful when in conjunction with the kind of learning where responses are more or less fixed. It is less useful for exploratory behavior or creative thinking.
18. A teacher's enthusiasm in his teaching and for his material can be a highly contagious motivational stimulant.

E. Range of Possible Instructional and Administrative Roles Played by Teachers. (Lindgren)

1. One instructor--i.e., the initiator, director, and evaluator of learning.
2. The classroom manager or disciplinarian.
3. The clerk--i.e., the reader, grades, files, reporter.
4. The youth group worker--i.e., involvement in extra-curricular activities.
5. The mental hygiene worker--i.e., the teacher as psychologist or counselor.
6. The parent-figure or parent surrogate figure.
7. The power seeker--i.e., the teacher who enjoys controlling or directing other people.
8. The security seeker--i.e., the person who turns to teaching because it offers reasonable financial and psychological security.

F. Teaching and Innovations in Instruction.

1. Television instruction.
2. Foreign-language laboratories.
3. Teaching machines
    a. Skinner's linear programming.
    b. Crowder's branching programming.
    c. Pressey's adjunct programming.
4. Team-teaching.
5. Non-graded schools.

III. THE PSYCHOLOGY OF LEARNING AND LEARNING PROCESSES

A. Learning Is a Process Not a Product Referring to Changes in Behavior Resulting From Experience. (Beyond this, the explanation of the learning process or even a precise definition is a matter of theoretical dispute. Its neurological basis is unknown at this time.)

B. Seven Basic Steps Involved In the Learning Process. (There is not complete agreement on the cruciality or even the relevance of these steps among all theorists. Field theorists, for example, emphasize perceptual reorganization rather than reinforcement.)

1. Goal refers to some consequence which the learner wishes to attain.
2. Readiness refers to the physiological, psychological, and experiential factors in the learner's repertoire which may predispose him to attain a certain goal or not.
3. Situation consists of all of the objects, persons, and symbols in the environment of the learner.
4. Interpretation is the reaction to encountering an obstacle in a situation, which must be evaluated so action can take place.
5. Response or action refers to the behavior a learner uses as a result of interpreting the situation.
6. Consequence of the action is either confirmatory and reinforcing, or contradictive and not used on future occasions. If goal not reached, the two previous steps are repeated.
7. Generalization refers to integration of new learning with previous learning.

C. Products of Learning, or Changes in Specific Ways of Behaving.

1. Simple responses, i.e., association of established behavior with a new stimulus--e.g., a baby's crying at an unfamiliar face.
2. Muscular habits, i.e., both simple and complex organizations of motor skills--e.g., walking, grasping, gynmastics, driving a car, etc.
3. Perceptual responses, i.e., interpretations we make of sensory impressions--e.g., we see, hear, or receive other sensory messages in terms of our experience to give them meaning.
4. Motives, i.e., social or psychological motives are learned through interaction with the environment, e.g., we learn to make a vocational choice and ways to achieve that goal.
5. Attitudes, i.e., predispositions to respond to selected aspects of our environment in either positive or negative ways--e.g., a student's attitude toward school.
6. Emotional responses, like attitudes, are also learned--e.g., a student learns to fear mathematics or to like it.
7. Problem solving ability, i.e., the ability to apply previous experience and learning to a new situation.
8. Language skills, i.e., words and symbols to represent and communicate learning and experience.

9. Personality, i.e., an individual's selfhood or life style. Influenced by hereditary forces, but is mostly the product of learning.

D. Basic Characteristics of Learning.

1. Learning is a continuous modification of behavior--i.e., it continues throughout life.
2. Learning is pervasive--reaches into all aspects of human life.
3. Learning involves the whole person, socially, emotionally, and intellectually.
4. Learning is often accompanied by a change in the organization behavior.
5. Learning is developmental--time is one of its dimensions.
6. Learning is responsive to incentives--positive incentives are generally more effective than negative ones.
7. Learning of a meaningful, lasting sort is usually connected to personal goals.
8. Learning and interest are usually positively related--i.e., most students learn best that which they are interested in.
9. Learning depends on readiness and motivation.

E. Techniques and Strategies to Enhance Learning.

1. Whole learning is probably better when:
    a. one wants a global picture of something without paying attention to details--e.g., scanning a book by looking only at chapter summaries and occasional paragraphs.
    b. one has an above-average I.Q.
    c. the material is meaningful and more concrete than abstract.
    d. the material is closely knit together, on one theme, and not too long.
2. Part learning is probably better when:
    a. a student is not very capable intellectually.
    b. feedback as to progress made is needed more frequently.
    c. the material is long, involved, abstract, and lacking a central theme running through it.
3. Distribution of practice and rest may be concentrated into relatively long unbroken periods or spread over several short sessions. Generally speaking, research shows that:
    a. learning, whether motor or verbal, occurs best and lasts longer when spaced over longer period of time--will be mastered better than a large number bunched into one lesson.
    b. longer learning periods call for longer rest periods.
    c. new tasks should be introduced to students in small quantities with short initial learning sessions and short rest intervals.
    d. greater motivation persists when new learning and practice are spread out over time.
    e. greater concentration persists when new learning and practice are spread out over time.

4. Recitation during learning--i.e., repeating once read material without looking at copy. Research shows that this method:
    a. provides for immediate feedback or reinforcement.
    b. allows one to concentrate on what he doesn't know.
    c. encourages greater ego-involvement.
    d. encourages active student involvement.
5. Overlearning--i.e., practice or review occurs beyond point of first errorless reproduction of new information. Best used when:
    a. learning specific, concrete material such as grammar rules, names, dates, multiplication tables, etc.
    b. there is a long interval between learning new material and its recall.
6. Mental set--i.e., an active intent to learn is more likely to result in success than passive attention--e.g., students are more likely to learn new material when they know they will be tested on it.
7. Use of praise or reproof has different effects on different students. Research generally supports the conclusions that:
    a. praise generates greater motivation than reproof.
    b. either praise or reproof are more effective motivators than no feedback at all.
    c. praise increases the work output of introverts more so than introverts who are reproved or extroverts who are praised.
    d. blame increases the work output of extroverts until it is significantly higher than that of extroverts who are praised or introverts who are blamed.
8. Relevant to personal needs--i.e., material which can be related to the student's life experiences is more likely to be learned and remembered for long periods of time.
9. Learnability of new material--i.e., extent to which material is learnable seems to depend upon several perceptual factors:
    a. Duration. The longer a student is exposed to new material the more likely he is to learn it.
    b. Frequency. The more often a student confronts the material he is to learn, the more likely he is to remember it.
    c. Recency. The more recently new material has been studied, the more likely it will be remembered.
    d. Contrast. The more strongly one part of a learning situation contrasts with another, the more likely it will be remembered.
    e. Vividness. The greater the impact (figure-ground differentiation), the more likely it will be remembered.
10. Differential classroom climates produce differential learning--i.e., the best teaching and learning goes on when the teacher can meet multiple student needs.

F. Research Conclusions Related to the Use of Positive Reinforcement in Learning.

1. Reinforcements are most likely to be effective if they follow performance immediately.
2. Since learning experiences differ from child to child, the conditions that reinforce also vary from child to child.

3. Well-established habits are best maintained through the use of a schedule of reinforcement that is less than 100 percent. Reinforcements for maintaining such habits should not be at regular intervals or after fixed amounts of work, but will be more effective if distributed at random.
4. Any novel or unusual event may function as a reinforcer.
5. The successful completion of a task or the discovery of the solution to a problem may be reinforcing for those behaviors that led up to these events.
6. Many reinforcers are conditions that satisfy needs. For this reason, effective learning commonly takes place when the task involved is related to the satisfaction of a need.
7. The magnitude of the reinforcement provided is not necessarily related to the amount of learning produced. In education, a safe rule, probably, is to use small reinforcements.
8. The magnitude of a reinforcement is likely to be of much less significance than the fact that a reinforcement will or will not occur.

G. Research Conclusions Related to the Use of Negative Reinforcement in Learning.

1. The punishment of incorrect responses generally increases the rate at which learning occurs, but this is not recommended since it may have other harmful effects, such as the development of an aversion for the entire learning situation.
2. Punishment and threat operate by producing inhibitions, which may generalize to other stimuli and responses and have considerable permanency. Hence, if punishment is used, it should be mild and directed primarily at the inhibition of responses which are incompatible with the response to be learned.
3. Failure depresses those intellectual activities closely associated with school learning. Failure experiences are likely to result in relatively inefficient learning in the period that follows them.

H. Goals and Aspirations as Related to Learning.

1. The nature of goals
    a. Defined as the first element in learning directly related to some consequence that the learner wishes to attain.
    b. Classification of goals
        (1) Multiple goals--i.e., goals are seldom concerned with single action to attain a specific end, e.g., the ultimate goals of reading are multiple and varied.
        (2) Intermediate goals--i.e., in route to any large or long-term goal are many short term or intermediate ones.
        (3) Remote goals--i.e., as student gets older, more of his activities are directed toward meeting partially or fully a great many goals.
    c. Goal attainment related to high state of motivation.

2. The nature of aspirations.
   - a. Defined as the standard which an individual sets up for himself called level of aspiration.
   - b. Factors affecting level of aspiration:
     - (1) Success and failure factors
       - (a) successful students tend to set more realistic goals than unsuccessful students.
       - (b) level of aspiration can be either raised or lowered according to anticipated future performance.
       - (c) as long as goals are attainable, the student needs to be challenged to expend some effort in maintaining a high level of aspiration.
       - (d) intermittent reward is a more powerful stimulus for performance than frequent and indiscriminate reward.
       - (e) success experiences usually lead to a raising of level of aspiration.
       - (f) failure generally results in lowering one's aspiration level.
       - (g) the greater one's success experience is, the greater the subsequent increase in level of aspiration.
       - (h) self-confident students prefer fairly different tasks and set high goals where there is some risk of failure.
       - (i) success and the expectation of further success increases the attractiveness of the task.
       - (j) failure and lessens the atractiveness of the task of similar type.
       - (k) the effects of failure are more varied than are those of success.
     - (2) Personality factors
       - (a) self-confident and secure students have higher levels of aspirations.
       - (b) high need achievers with a strong need for competence prefer tasks where there is some risk of failure.
       - (c) social importance of grades in school influences level of aspiration.
     - (3) Group factors
       - (a) level of aspiration usually set in accord with group(s) to which one belongs.
       - (b) group decision about a goal can lead to superior performance if holding the approval of the group is important to the members.
       - (c) social importance of grades in school influences level of aspiration.
     - (4) Reward and punishment factors
       - (a) reward tends to encourage repetition of response.
       - (b) increases in reward beyond point of getting student to engage himself seriously in a task has no effect on learning the response.
       - (c) the risk of punishment makes a student more attentive and realistic during learning.

- (d) threat makes a student insensitive to subtle cues.
- (e) punitive teacher behavior makes children more aggressive.

(5) Social class factors
- (a) similar social class students are likely to have the same level of aspirations.
- (b) child-rearing practices which place high demands on children tend to raise the aspiration level of children.
- (c) occupation of father and level of intelligence of the child are positively related to level of aspiration.

I. The Learning of Skills.

1. Skill learning defined: Any performance which requires the refinement of an organized pattern of responses would be skill learning and includes:
   - a. psycho-motor or manipulative skills.
   - b. perceptual skills.
   - c. language and communication skills.
   - d. feeling or affective skills.
   - e. problem-solving skills.
2. Task variables which influence the learning of skills:
   - a. guidance and demonstration.
   - b. length of task--i.e., long involved skills require more time for mastery.
   - c. difficulty of task--i.e., difficult tasks require more time and effort.
   - d. meaningfulness of the task--i.e., skills which are functional and meaningful are easier to acquire.
   - e. reinforcement of correct response after it is made.
3. Individual variables which influence the learning of skills.
   - a. physical growth status.
   - b. maturation level.
   - c. intellectual capacity.
   - d. previous experience.
   - e. motivation to learn.
4. Principles of learning applicable to skill learning.
   - a. Skills should be learned in accordance with level of motivation.
   - b. Skills are learned best when there are clear goals and purposes.
   - c. Needs, interests, and aspirations of learner should be taken into consideration.
   - d. Too much guidance causes learner to lose initiative--too little may leave him confused and overwhelmed by the task.
   - e. Criticism should be constructive--praise is more effective than reproof.
   - f. Skill learning should be integrated with other aspects of the student's development.

J. Higher Mental Processes as Related to Learning.

1. The nature of problem-solving:
    - a. Analysis of the goal.
    - b. Analysis of the situation.
2. Steps involved in problem-solving (scientific method):
    - a. Awareness of the problem.
    - b. Clarification of the problem.
    - c. Arriving at a hypothesis.
    - d. Testing the hypothesis.
    - e. Generalization.
3. Barriers to problem-solving:
    - a. Lack of motivation.
    - b. Attitudes which limit thinking, such as prejudice.
    - c. Lack of independence from authority.
    - d. Lack of adequate technique or system, such as in use of trial and error.
    - e. Lack of flexibility in thinking.
    - f. Lack of self-confidence.
4. Ways to encourage group problem-solving:
    - a. Group must be motivated toward common goal.
    - b. Knowledge and information necessary to solve problem must be available to the group.
    - c. More likely to be successful if task allows a division of labor.
    - d. Group must be small enough to allow all members to participate.
    - e. Discussion, debate, criticisms, and suggestions facilitate group problem-solving behavior.
    - f. Permissive atmosphere involving friendliness and cooperation promotes group problem-solving behavior.
5. Principles of learning applicable to problem-solving:
    - a. Problems involving personal needs are more likely to be learned.
    - b. Opportunity for repetition of the problem-solving behavior in similar situations and at same level of difficulty should be provided.
    - c. Rewarded problem-solving behavior is more likely to be learned.
6. Learning as related to concept formation:
    - a. Concepts represent classifications of experiences, which are formed through opportunities to classify exemplars under conditions which provide the learner with information concerning the correctness of the classification.
    - b. Attainment of concepts involves the identification of the defining attributes of the class phenomena included in the concept.
    - c. The time to learn a concept may be shortened by providing cues concerning the nature of the defining attributes.
    - d. Sudden insight into the solution of a problem occurs in those situations in which the learner has had extensive previous experience with related problems and with transferring what he has learned to new, but related, problems.

K. Memory and Retention as Related to Learning.

1. Retention of new material depends on factors such as:
   a. practicalness and functionalness of course content.
   b. appeal of course content.
   c. method of learning.
   d. method of teaching.
   e. nature of the learner, e.g., intelligence.
2. Factors which positively affect retention:
   a. Meaningfulness of material.
   b. High interrelatedness of components in the material.
   c. Above average intelligence.
   d. High interest in material being learned.
   e. Experience of the learner.
   f. High degree of mastery of original and interpolated learnings.
   g. Effectiveness of review.
   h. Extent of overlearning.
3. General research conclusions regarding retention:
   a. Overlearned skills are better retained than skills learned to a lesser degree.
   b. Information is better retained if it is consistent with the learner's own values than if it is inconsistent.
   c. Forgetting is largely a result of the interferrence of other learning activities with what is to be retained.
   d. The typical curve for the retention of a skill shows a relatively sharp initial decline and then a gradually less rapid decline.
   e. Meaningful material is more easily learned than meaningless material because it represents material that has already been partly learned.
   f. Individuals are less likely to remember information which is inconsistent with the position they already hold.

4. Teaching strategies to enhance retention:
    a. Be sure students understand material to be retained.
    b. Encourage periodic reviews.
    c. Encourage certain degree of overlearning.
    d. Introduce new material so it can be integrated with previous learning.
    e. Avoid scheduling lessons which tend to interfere with each other.
    f. Encourage the intent to remember.

L. Transfer of Training as Related to Learning.

1. Principles to facilitate maximum transfer of learning to situations outside the classroom include:
    a. teaching for transfer.
    b. providing opportunities in which generalizations can be discovered.
    c. making the material meaningful.
    d. pointing out the possibility of transfer from one situation to another.
    e. applying new material to novel situations.
    f. selecting instructional materials for making relationships vividly apparent.
    g. using examples and illustrations of applications of principles when teaching concepts of a broad and abstract nature.
    h. allowing a generous amount of time to practice a new skill.
2. Examples of specific transferable responses:
    a. Specific facts or associations, e.g., prefixes which have the same meaning in nearly all cases, such as sub., pre., and in.
    b. Skills of a motor or perceptual type, e.g., tasks requiring development of the fine muscles of the hands prepare them for other tasks requiring this kind of movement, such as writing, or playing a musical instrument.
    c. Attitudes toward objects, situations, or school subjects, e.g., an attitude connected with failure in school can be transferred to other areas of life.
    d. The self-concept, i.e., the view a student has of himself derived from many experiences which influence his feeling that he is generally as able as, or less able than most other students.

M. Motivation, Motivational Processes, and Needs as Related to Learning.

1. The nature of motivation.
    a. Defined as a predisposition toward certain kinds of behavior, and is able to arouse, sustain and direct, and control the intensity of the effort to learn. Viewed from the point of view of the behaver himself, he is never unmotivated. Each person is motivated by a continuous endeavor to maintain and enhance personal adequacy.

- b. Motivation is a process that can:
  - (1) lead students into experiences in which learning can occur.
  - (2) energize and activate students to keep them reasonably alert.
  - (3) Keep students' attention focused in one direction at a time.
- c. Motivation is likely to occur when:
  - (1) a student is seeking to satisfy his needs of belonging, achievement, approval, and self-esteem.
  - (2) a student discovers that his previously learned ways for behaving no longer satisfy particular needs and that new patterns of behavior offer him the satisfaction he is seeking.

2. The nature of needs
   - a. Defined as a state of deprivation within a person motivating him to react in such a way that the need will be satisfied--e.g., lack of body moisture motivates one to drink water. A need must be felt or sensed prior to a motivation to satisfy that need.
   - b. Four classifications of needs:
     - (1) some basic needs are universal--e.g., need for moisture, food, air, rest, change, sex.
     - (2) some needs are acquired within a cultural or social context--e.g., need for achievement, status, or power.
     - (3) the needs of a particular individual are dependent on his developmental stage--e.g., the need for a young child to engage in large muscle activity or to demand more rest.
     - (4) There are many unconscious needs--e.g., the need to avoid heights or even certain school subjects without knowing why.
   - c. Model for a hierarchy of needs. (Maslow)
     - (1) Organic or maintenance needs--i.e., needs for air, food, water, sleep, elimination, change, sex.
     - (2) Safety needs--i.e., needs for consistency and security.
     - (3) Love needs--i.e., needs for belonging, giving and receiving affection.
     - (4) Esteem needs--i.e., needs for approval and adequacy.
     - (5) Self-actualization needs--i.e., needs to reach one's highest potential.
3. Factors affecting the arousal, direction, duration, and intensity of motivation.
   - a. Maturation and developmental level of the learner.
   - b. Readiness and integration ability--i.e., readiness for new learning in light of past experience.
   - c. Praise and reproof--research shows that:
     - (1) reproof not as effective as praise.
     - (2) both praise and reproof better than no comment.
     - (3) indiscriminate use of either may be harmful.
     - (4) the security of the student an important condition.
   - d. Degree of attention and interest--i.e., the higher these are the more likely a student will be motivated.

e. Extrinsic rewards--i.e., incentives outside of the learner and extraneous to learning situation, e.g., money, stars.

f. Intrinsic rewards--i.e., incentive growing from within the learner, e.g., sense of personal accomplishment.

g. Success and failure--i.e., success is usually a more positive motivational stimulant.

h. Purpose or intent to learn--i.e., motivation more likely to persist when purpose and intent to learn is high.

i. Knowledge of progress--i.e., motivation more likely to remain high when progress is known.

j. Competition and cooperation--i.e., although students enjoy cooperation, competition challenges most when match is fairly even.

k. Identification--i.e., when teacher sets a desirable example so that students can identify with him, motivation is likely to be positively influenced.

l. Mastery--i.e., sense of competence growing out of being good at something can stimulate further motivation.

m. Curiosity--i.e., the natural need to know, explore.

n. Personal security--i.e., students who feel secure with respect to achievement, interpersonal relationships will be more willing to learn.

o. Clear assignments and definite goals--i.e., clear assignments:
   (1) make it easier to see relationships.
   (2) cause better understanding.
   (3) make learning more meaningful.

p. Respect for the individual--i.e., students who are made to feel important are more likely to sustain a high level of motivation.

q. Social approval--i.e., approval often acts as a motivator when given by age-mates, teachers, parents, or other adults. the strength of social approval as a stimulus for motivation depends on:
   (1) need for attention and social recognition.
   (2) perceived value of individual or group offering approval.
   (3) previous satisfactions from similar situations.
   (4) perceived genuineness of the social approval.

r. Achievement motivation develops during the early school years and is related particularly to the attitudes of the parents with respect to the child being independent.

s. Measured interests bear little relation to motivation for achievement.

N. Special Difficulties Influencing Learning.

1. Contributing factors to special difficulties:
   a. Physical factors
      (1) physical condition--i.e., general health, energy level.
      (2) variations in maturity.
      (3) malnutrition and other dietary problems.

            - (4) other physical factors
                - (a) glandular problems.
                - (b) orthopedic defects.
                - (c) infections.
                - (d) metabolic disturbances.
        - b. Sensory problems
            - (1) nearsightedness, forsightedness, astigmatism.
            - (2) hearing defects.
        - c. Intellectual factors
            - (1) low state of readiness or mental age.
            - (2) low intelligence.
            - (3) underachievement in terms of ability to produce.
        - d. Home and family factors
            - (1) socioeconomic level, which tends to determine:
                - (a) amount of experience.
                - (b) language usage and skills.
                - (c) attitudes toward self, school, and academic achievement.
        - e. Personal and interpersonal maladjustments.
        - f. Instructional factors
            - (1) failure to modify program to meet individual needs.
            - (2) classes too large for individual attention.
            - (3) lesson poorly presented or not well motivated.
    - 2. Data needed for diagnosis of learning disabilities
        - a. Physical conditions of student.
        - b. Intelligence.
        - c. Aptitudes.
        - d. Achievement.
        - e. Social-emotional behavior.
        - f. Home and family data.
        - g. Work-study habits.
        - h. Knowledge of subject difficulty.
    - 3. Diagnosis involves identification of:
        - a. specific nature of the difficulty.
        - b. causes of the problem.
    - 4. Remedial programs should consider:
        - a. physical factors.
        - b. motivational factors.
        - c. family background.
        - d. past school performance.
        - e. the way the student feels about himself.

IV. THE EVALUATION OF LEARNING.

A. Functions of Evaluation.

1. It is reinforcing in showing the learner that he has (or has not) made progress.
2. It assists the teacher in judging the effectiveness of instruction to see whether objectives are being met.
3. It helps the student to see how he should change or adapt his behavior.

4. Future plans regarding vocational planning, remedial instruction, or enrichment can be more adequately made.
5. The information is useful to administrators in adjusting programs and policies.

B. Characteristics of a Good Evaluation Program.

1. Growth and development of each individual is the basis for evaluation rather than comparison of one individual with another.
2. Evaluation is a continuous process.
3. As much information about each student as possible is gathered prior to final evaluation.
4. Evaluation is both quantitative and qualitative.
5. Evaluation should be a cooperative venture involving student and teacher.

C. Types of Teacher-made Evaluation Instruments.

1. Essay tests.
2. Objective tests:
    a. completion.
    b. short answer.
    c. true-false.
    d. matching.
    e. diagram items.

D. Types of Standardized Tests.

1. Intelligence tests.
2. Achievement batteries.
3. Aptitude tests.
4. Interests, values, and attitudes tests.
5. Character and personality tests
    a. Inventories and questionnaires of the self-report type.
    b. Rating scales.
    c. Situational tests.
    d. Projective tests.

E. Characteristics of a Good Test.

1. It has validity--i.e., measures what it is supposed to measure.
2. It has reliability--i.e., it is consistent.
3. It is usable in terms of:
    a. time for completion.
    b. level of difficulty.
    c. ease of scoring.
    d. interest value to students.

F. Research and Experts' Conclusions Related to the Evaluation and Measurement of Learning.

1. Measurement and evaluation are integral aspects of the total teaching-learning process, which provide the basis on which a student's further growth can be planned and guided most effectively.
2. Sound evaluation begins with sound measurement derived through valid and reliable instruments, but it goes beyond measurement in that it appraises the results of measurement in light of the students, the objectives of the course, and the particular circumstances involved.
3. An academic test is valid when it is relatively free from factors which are extraneous to the objectives of the course.
4. A test should be reliable and teachers should be cautious when evaluating the results of a short test. The essay exam is notoriously low in reliability.
5. Tests can be standardized or informal, objective or subjective. None is "better" than any other; each is most valid under certain circumstances, and it is a matter of chosing the right type of test for one's specific purpose.
6. To measure achievement effectively the teacher must be:
   a. skilled in the practical art of testing.
   b. a master of the knowledge or skill to be tested.
7. Grading is a matter of synthesizing the evaluation of the various aspects of the student's performance into a single symbol. The primary point of reference available to the teacher in assigning grades is the performance of other members of the class and grading must inevitably be "on the curve".

V. THE CHILD AS A DEVELOPING ORGANISM

A. Basic Principles of Growth and Development.

1. Development is the product of the interaction of the organism and its environment and must be understood as the consequence of these two forces combined.
2. Although some periods of growth are more rapid than others, development is a continual and gradual process.
3. Development of many functions proceeds most rapidly during the early years of life.
4. Individuals differ at birth and this difference continues to maturity consistent with the relative developmental rate of each individual.
5. There are wide individual differences in developmental trends in rate and pattern of growth, which makes rigid classifications of educational experiences inappropriate for many individuals.
6. Development is a process both of differentiation and of integration--e.g., at birth, if a baby is pricked with a pin, the response is that of mass activity. As the child matures it also grows to have a specific response to a similar stimulation. This is differentiation. The act of walking is an example of integration. The direction of growth is from the general to the specific.

7. The direction of physical growth proceeds in a manner which is cephalo--caudal (head toward the feet) and proximo--distal (spinal column toward extremities.)
8. All aspects of development are highly interrelated and interdependent--e.g., mental development is dependent on the physical development of the central nervous system.
9. The younger the child the more he does everything of which he is capable. At a very early age of development the child is not limited in his activity by the inhibitions of social pressure, attitudes, expectations of others, etc.
10. Much learning is dependent on maturation--e.g., research dealing with twins demonstrates that:
    a. when one twin was given special training, he developed skills sooner than the untrained one.
    b. when the training was stopped, the untrained twin soon caught up to the trained twin in developing the same skill.
11. Within a given child various types of development occur at different rates, even though there is some correlation among the various traits.
12. Even though the sequence of events in developments is the same or nearly so for all children, the rates will vary depending upon the child's genotype and the environmental conditions which together produce the development.
13. Structure generally precedes function--i.e., the structure of a muscle group is intact and ready for use before it is completely used, and although the brain weight is complete by seven or eight years of age, the child is not ready to do certain kinds of abstract thinking.

B. Approaches to Understanding and Studying Growth and Development.

1. The developmental philosophy: (A. Gesell, W. Olson)
    a. Each infant's racial and,familial inheritance prescribes his growth sequence and growth pattern.
    b. The human organism functions and grows as a highly interdependent part of a unitary process.
    c. Growth is studied with either a cross-sectional approach (Gesell) or longitudinal method (Olson) and observations of behavior are grouped into four categories: (Gesell)
        (1) physical
        (2) intellectual.
        (3) adaptive.
        (4) emotional--social.
    d. Each "stage" of growth is characterized by the generalized physical, mental, and behavioral characteristics of children at two, two and a half, three, etc.
2. Havighurst's development task concept:
    a. At each particular life period, people are confronted with certain developmental tasks--skills, attitudes, understandings--that they need to achieve and are expected to achieve prior to moving on to subsequent tasks.

b. Examples of developmental tasks associated with each of six life periods:
   (1) Infancy and early childhood (birth to 6 years)
      (a) learning to walk.
      (b) learning to talk.
      (c) learning to control elimination of body wastes.
      (d) learning to distinguish right from wrong.
   (2) Middle childhood (6-12 years)
      (a) learning physical skills.
      (b) learning to get along with age mates.
      (c) developing fundamental skills in reading, writing, and calculating.
   (3) Preadolescence and adolescence (12-18 years)
      (a) achieving a masculine or feminine role.
      (b) achieving emotional independence from parents.
      (c) selecting and preparing for an occupation.
   (4) Early adulthood (18-35 years)
      (a) selecting a mate.
      (b) starting a family.
      (c) taking on civic responsibility.
   (5) Middle age (35-60 years)
      (a) assisting teenage children to become responsible and happy adults.
      (b) relating to one's spouse as a person.
      (c) adjusting to aging parents.
   (6) later life (60--)
      (a) adjusting to decreasing physical strength.
      (b) adjusting to retirement and reduced income.

3. Erikson's neo-psychoanalytic approach:
   a. A way of using the developmental task concept and incorporating both the inner growth forces and society's demands on the individual. Each is a growth stage or crisis which must be resolved satisfactorily for success at later points in time. Failure at any stage could result in specific damage to the ego.
   b. Erikson's eight stages, in sequence:
      (1) Trust: belief in oneself--results from perceiving world as consistent and dependable.
      (2) Autonomy: sufficient trust in self and parents to dare to defy them, but ability to cooperate and accept their help.
      (3) Initiative: sense of being able to direct events within the realm of conscience without feeling guilt.
      (4) Industry: sense of competence in mastering the basic skills required for social usefulness.
      (5) Ego identity: integration of past experiences in a concept of self that is consistent, agreeable, and consistent with what one wants to be.
      (6) Intimacy: ability to lose oneself in an intimate relationship with no fear of losing one's identity.
      (7) Generativity: ability for a parental kind of responsibility by being more interested in giving love than getting it.

(8) Ego integrity: identification with the dominant ideals of one's culture so that one can be content with his individual life cycle.

C. Physical Growth and Motor Development.

1. Growth curves:
   a. show rapid growth between birth and two years of age.
   b. show that during kindergarten and early elementary school years growth continues at a diminished rate.
   c. show an accelerated rate of growth about two years before puberty.
   d. show that after puberty there is a gradual and continuous deceleration of the growth curve.
   e. show that although girls mature about 18 months to two years ahead of boys, the shape of growth curves for boys and girls is similar.
2. Size and social status are closely related--i.e., a child's physical competency determines his relationship to his peers. Research conclusions related to size and social status show that:
   a. Physically adequate boys are more apt to be more confident, get along well with others, and have enjoyable childhoods.
   b. The small child who perceives himself as inferior in size may compensate through either submissive or aggressive behavior.
   c. Having an attractive figure and a pretty face are as important to a girl's social position as are the boy's size and strength.
   d. Problems of overweight have negative social effects for both sexes.
3. Sex differences in growth between boys and girls show that:
   a. On the average, girls reach maturity 18 months to two years ahead of boys.
   b. Between the ages of 12 and 14, girls are usually taller and heavier than boys, but after that the boys surpass and maintain a general size-height advantage over the girls.
4. Research conclusions about motor development show that:
   a. Children (especially boys) place a high premium upon physical strength, vigor, and coordination and that there is probably a closer relationship between popularity and strength than between popularity and I.Q.
   b. Growth of muscle mass precedes its functional development, hence it is not uncommon to find children who look big enough to be well coordinated but who are in fact functionally immature.
   c. Motor skills in one area (running, jumping) do not correlate highly with those in other areas such as manual dexterity.
   d. There is only a slight relationship between a child's mental ability and his motor skill.

  - e. Lack of confidence may preclude a child's receiving sufficient opportunities for the necessary practice in developing motor skills, e.g., over-protected children often shrink from contact games, thus losing the opportunity both for the learning of the physical skills involved, and for important social contacts.

5. Research conclusions about speech development show that:
   - a. The development of speech parallels the development of thinking.
   - b. There is a high correlation between verbal aptitude and other capacities (e.g., mathematical and spatial abilities). General intelligence may be said both to stem (partly) from and to contribute to verbal ability.
   - c. At all stages, the child's (as the adult's) latent, or passive, vocabulary (words understood) materially exceeds his spoken vocabulary.
   - d. Other things equal, speech develops earlier and better:
     - (1) the healthier the child.
     - (2) the more intelligent the child.
     - (3) the greater the opportunity to learn.
     - (4) the higher the social class.
     - (5) in girls than in boys and the difference tends to expend with age.
     - (6) in normal homes than in institutions.
     - (7) the fewer the number of siblings.
     - (8) if a child is only learning one language.

D. Growth and Changes It Produces.

1. Changes in proportion to the body are numerous--for example:
   - a. At birth the head accounts for one-third the height of the body, while at maturity it is one-seventh the body height.
   - b. The legs increase in length to the fifteenth year and account for the major change in proportion of body height.
   - c. The body stem increases slowly in length.
   - d. The broad body of the infant grows more slender until close to maturity.
   - e. Near maturity the male broadens at the shoulders and the female at the hips.
   - f. The nose and feet show growth in size out of proportion to the rest of the body during adolescence, which accounts for part of the insecurity and sensitiveness of the adolescent.
2. Changes in organs and tissues occur at varying rates--for example:
   - a. The nervous system has almost completed its development in size by the age of 12.
   - b. The heart increases five times in size the first six years and doubles in size again by age 17 or 18.
   - c. The blood pressure rises while the pulse rate drops. At birth the pulse is 130-150 per minute and there is little increase in blood pressure until about the age of puberty.
   - d. The respiratory rate decreases from about 40 per minute at birth to about 16 per minute at adulthood.
   - e. The weight gain of bones continues until the age of 35.

   f. Baby teeth emerge at six months and are replaced by permanent teeth from the ages of 6 to 13.
   g. Muscle composition of the body increases 23 percent of the body weight at birth to 44 percent at age 16.
3. Research on physical growth and change and their effects on personality show that:
   a. Early maturing boys tend to become more socially adept than the average.
   b. Late maturers show indications of insecurity to a greater extent than early maturers.
   c. The prepuberal years can be difficult ones for girls. There are peaks of shyness, emotional dependence, and irritability arising about one year ahead of the menarche, which are more common to early maturers than to late maturers.
   d. The development of the early maturer puts the girl at a social disadvantage in grades 7 and 8, but this tends to reverse itself in high school.

E. General Research Conclusions Related to Growth and Development.

1. The life cycle is continuous but there are certain well-defined stages of growth within it through which all children seem to pass.
2. Each stage of growth has certain characteristics of physical and behavioral development which differentiate it from other stages.
3. Becoming mature is a cummulative process. Each stage of growth builds on what has gone before, good or bad. Each stage has its own criteria of maturity.
4. Growth involves both heredity and environment in a complex interactive process. A healthy environment is necessary if a child is to realize the growth potential furnished by his heredity.
5. *Growth is a unitary process. Such factors as physical, mental,* behavioral, and emotional growth are all interrelated in the total growth process.
6. "Average" is a statistical concept. Half of the children in any randomly selected group will fall below the median; therefore it cannot be used as a "norm" or an expectancy figure for all the children in the group.
7. Teaching a child before he has reached the necessary developmental level is futile and may do great damage to the child.
8. Starting in early childhood, and increasingly as he gets older, a child's idea of himself and his worth affects what he does and what he learns.
9. The limits of a person's capabilities are set in considerable measure by his inherited potentialities. Recent research in early stimulation has caused a major reconsideration of the former emphasis on the immutability of maturational processes and of the scope of human and animal capacity. Research suggests a need for a major shift in the meaning of capacity from something one has to something one develops.
10. The interrelatedness of the various aspects of development points to the need for dealing with the whole child. This interrelatedness, along with the fact that development follows a definite sequential pattern, implies that failure to master a certain developmental task at the appropriate time is likely to impede further progress.

F. Basic Principles of Emotional-Social Factors Involved in Growth and Development.

1. The relationship of emotions to education is based on the emotional impact of need frustration--i.e., in finding new ways to discharge emotional tension, learning takes place. An emotion is a motivated state characterized by:
    - a. intensity of reaction.
    - b. persistence.
    - c. viseral changes.
2. Emotional development and differentiation of emotions follows a pattern:
    - a. General excitement is the only emotional response at birth.
    - b. Distress and delight are accomplished by third month.
    - c. Fear, disgust, anger all added by six months.
    - d. Elation and affection are apparent by one year of age.
    - e. Maturation continues the pattern of differentiation until the many variations of adult emotions are refined.
3. Overt expression of emotions decreases with age, which is the result of learning. This is partly due to the fact that growing children acquire other means of expressing feelings--e.g., through sublimation. In addition, the effect of cultural expectation also plays a part. For example:
    - a. Girls are allowed and encouraged to express emotions freely.
    - b. Boys learn that open displays of emotion are not generally reinforced.
4. Unexpressed strong emotional feelings usually lead to interpersonal tension and anxiety which interferes with effective functioning and learning.
5. Emotional susceptibility declines with age. Research shows that
    - a. Stimuli arousing emotions in the child are from his immediate environment and his inner state--e.g., fatigue, hunger, illness.
    - b. Stimuli affecting adults are further removed in time and space and the adult's ability to predict consequences helps him avoid frustrating situations.
    - c. Any threat to the satisfaction of needs is likely to arouse emotion and the adult has many more ways than the child of satisfying most of his needs.
    - d. Less secure children (and adults) are more easily threatened and thus more likely to react emotionally.
    - e. Attacks on values which are highly related to the self-concept of an individual are likely to arouse strong emotions.
6. Anger is a common emotion aroused as a result of threat to certain needs. Laboratory and clinical research conclusions related to anger and its expression suggest that:
    - a. In the young child, anger is provoked by restraint of movement or thwarting of desires.
    - b. As the child gets older, any interference with his activities, prestige, plans, or desires, such as a need for independence during adolescence, could result in anger.
    - c. In school, anger may be provoked by assignment of tasks beyond his ability, lengthy periods of confinement at a desk and demands to remain on a task beyond attention span.

d. An angry response is more probable under conditions of fatigue, sleepiness, illness and periods of tension.

e. Anger stimuli are cummulative and may build up to an explosive level when control is good.

f. Anger from early frustrations may leave the individual with underlying hostility or resentment, which could result in an abnormal drive to "be someone", or outdo others.

g. As the child matures, anger expressions may become more subtle--e.g., as he learns to use the language, he is no longer limited to a physical acting out as an expression of anger.

h. The value of anger is that it may serve to bring underlying tensions to a head so that more constructive ways for dealing with the problem can be developed.

i. Outbursts of anger may sometimes reveal important details about a student and his perception.

7. Fear is another common emotion which is a reaction to a situation with which a person is unable to cope or which he perceives as dangerous. Laboratory and clinical research conclusions related to fear and its expression suggest that:

a. As a child grows older, fears of concrete objects are replaced by imaginary dangers.

b. Fear of the dark is a common fear of childhood, because the dark hides unseen dangers.

c. Fear of being left alone commonly occurs during the pre-school years--e.g., hospitalization and school entrance are experiences where separations may exaggerate this fear.

d. For the most part, fear of either known or unknown objects is something that is learned and therefore can be unlearned with the guidance of a sensitive adult.

e. Factors which may contribute to fear reactions:
   (1) illness, fatigue, or insecurity.
   (2) demands greater than one can handle.
   (3) reminders of failures.
   (4) difficulties in competition.
   (5) perceived loss of affection or esteem.
   (6) living with parents who have many fears.

f. The expression of fear varies greatly--e.g.,
   (1) nonparticipation may be a sign of fear.
   (2) hostility, anger, or rebellion may mask fear.
   (3) submission or withdrawal are often reactions due to fear.

g. Fear can serve to protect one from harm and difficulty and to motivate him to learn new and more effective ways of behaving.

h. Techniques for dealing with fear concern prevention, and the development of competence--e.g.,
   (1) gradual introduction to new experiences can help avoid the arousal of fear.
   (2) verbal reassurance and having the individual try to understand his fears are necessary.
   (3) improving a child's competence so that he is not easily threatened.

8. Defense mechanisms designed to protect and preserve the emotional self:
    a. Denial of reality--i.e., refusing to see unpleasant parts of reality.
    b. Fantasy--i.e., gratification of frustrated desires in imaginary achievements.
    c. Compensation--i.e., making up for frustration in one area by overgratification in another.
    d. Projection--i.e., placing blame for difficulties on others.
    e. Rationalization--i.e., making socially acceptable excuses for doing something one knows he shouldn't do but does anyway.
    f. Suppression--i.e., pushing to the background of consciousness thoughts and feelings which are painful to admit.
    g. Reaction formation--i.e., preventing dangerous desires from being expressed by doing the exact opposite of what one really wants to do.
    h. Displacement--i.e., discharging pent-up angry or hostile feelings on a less dangerous object than that which originally aroused the emotions.
    i. Emotional insulation--i.e., withdrawal into passivity to protect self from hurt.
    j. Regression--i.e., retreating to earlier developmental level involving less mature responses and usually a lower level of aspiration.
    k. Sublimation--i.e., gratification of socially unacceptable desires in more socially acceptable channels.
    l. Undoing--i.e., atoning for and thus counteracting immoral desires or acts.
9. Emotional-social development is influenced to a large extent by what happens in schools. Research done in this area suggests that teachers must understand that:
    a. Emotional stresses and frustrations interfere with intellectual efficiency and learning.
    b. Harsh, primitive discipline may cause emotional stress and frequently leads to counteraggression on the part of the child.
    c. The function of discipline is to assist the child toward controlling himself as opposed to having someone do it for him.
    d. The teacher who frequently loses his tempter, is overbearing, sarcastic, or unfair may induce strong negative responses in his students.
    e. It is the professional responsibility of the teacher to know himself well enough so as to be able to separate his problems and needs from his students.
    f. A positive program for promoting emotional--social health and security is a major responsibility of the school in order to help provide for at least six basic needs of children:
        (1) need for belonging.
        (2) need for understanding and knowledge.
        (3) need for status and recognition.

        (4) need for security and regularity.
        (5) need for love and affection.
        (6) need for independence and choice.
    g. Emotional-social development is a slow process of learning to get along well with oneself and others and teachers can do much to enhance those skills.

G. Impact of the Family and Child-Rearing Practices on the Developing Child.

1. Research conclusions regarding five general categories of child-rearing styles and their effects on children:
    a. *rejecting parents*--tend to be disapproving, hostile, dictatorial, and emotionally distant--children likely to be either very shy and submissive or very sadistic and aggressive--finding little security in the home, they feel even more insecure out of it.
    b. *overprotecting parents*--tend to be easily threatened, concerned, and worried about either a real or more likely an imagined loss of the child, which could either be the long awaited for and finally achieved *only* child, or child used to gratify love needs not directly met in a normal marriage relationship--early excessive physical contact between mother and child plus prolonging and encouraging infantile dependent behavior are two major maternal behaviors which foster children who are dependent, infantile, regressive, submissive, and generally regarded as "good" children because they are polite, neat, gentle, and respectful.
    c. *overindulging parents*--tend to have weak controls, allow child to have his own way about most things, and usually feel uncertain about their status in the child's eyes--frequently the permissive pattern is a way of "buying" a child's love--children are likely to be disobedient, demanding, aggressive, egocentric, infantile.
    d. *authoritarian parents*--tend to be either all-punishing or all-rewarding, to look at things only from their own point of view and to establish rigid and absolute standards for behavior--children either submit to parental authority and all authority thereafter or rebel (more likely among children with higher intelligence).
    e. *rational democratic parents*--tend to be a blend of those styles cited above--i.e., they can be firm or permissive, loving or rejecting depending on the situational context of the interaction--parents of this sort are likely to *agree* with the following research substantiated conclusions about how to raise children with good adjustment and high self-esteem:
        (1) Children who are held to firm rules grow up to be the best adults.
        (2) It is more effective to reward a child for doing well than to punish him for failing.

        (3) A child should have the right to question the thinking of parents.
        (4) There is no reason why parents should have their way all the time, anymore than children should have their way all the time.
        (5) Children should have a say in the making of family plans.
        (6) Children would be happier and better behaved if parents showed an interest in their affairs.
        (7) A child has a right to his own point of view and should be allowed to express it.

2. Five trends from research reflecting changes in the typical American parent over the past 25-30 years:
    a. Greater permissiveness toward the child's spontaneous desires.
    b. Freer expression of parental affection.
    c. Increased reliance on indirect "psychological" techniques of discipline (such as reasoning or appeals to guilt) vs. direct methods (like spankings or scoldings).
    d. In consequence of the above shifts in direction of what are predominately middle class values and techniques, a narrowing of the gap between social classes in their patterns of child rearing.
    e. The relative position of the father and the mother is shifting with the father becoming increasingly more affectionate and less authoritarian, and the mother becoming relatively more important as the agent of discipline, especially for boys.
3. Child-rearing research conclusions related to the development of general personality:
    a. The less the affection, satisfaction of independence, and warmth the infant or child receives, the less quickly he will mature and the less strength of character and sense of self he is likely to have.
    b. The weaker a child's identification with his parents, the less developed and less strong his personality or ego is apt to be.
    c. Severity of socialization (i.e., highly rigid or highly critical practices by parents) seems to make for generalized anxiety in later life.
    d. In the normal range of infant experience, events subsequent to the first year or two of life have the power to "confirm or deny" the personality of the growing infant, to perpetuate or remake it, depending upon whether the situation of later childhood perpetuates or alters the situation in which the infant was reared.
    e. Both responsibility and leadership are fostered by the relatively greater salience of the parent of the same sex--i.e., boys tend to be more responsible when the father rather than the mother is the principal disciplinarian; girls are more dependable when the mother is the major authority figure--boys thrive in a patriarchal context, girls in a matriarchal one.

   f. The most dependent and least dependable children tend to come from families that are neither patriarchal nor matriarchal, but equalitarian.
   g. The absence of the father not only affects the child directly, but also influences the mother in the direction of greater over-protectiveness--especially critical for male children--i.e., boys from father-absent homes tend to be markedly more submissive and dependent.
   h. Relative lack of involvement in child rearing by the parent of the same sex impedes the development of responsibility and leadership in both sons and daughters.
   i. Parental affection tends to have sharply contrasting effects on sons and daughters--e.g., warmth and companionship facilitate the development of leadership in boys but impede its emergence in girls.
   j. To a great extent, the pervasive emotional tone established by parents in raising children (especially the loving-rejecting tone) affects subsequent development more than either the techniques of child-rearing (e.g., permissiveness, restrictiveness, punishment, reward) or the cohesiveness of the marital unit (whether it is stable or broken by divorce or death).
   k. It is difficult to find a case history of a psychotic or neurotic without some (usually childhood) traumatic experience; but it is equally difficult to find a case history of a normal person without such an experience. There is little support for the notion that important differences in adult personalities reflect singular events in the life history--rather it is the cummulative effect of experiences and events over time and which tend to reinforce each other which seem to make the difference in personality development.

4. Child-rearing research conclusions related to the development of independence:
   a. Rigidity and severity in the feeding and weaning of the infant make for dependency in early childhood years.
   b. The more rejected the child feels, the more dependent he is likely to be.
   c. The earlier a child is forced to be independent, the more concerned and even anxious he is about his independence in adult life.
   d. Very great nurturance during infantile and childhood dependency (as in the case of maternal over-protection and over-permissiveness) also seems to lead in opposite directions--continued need for dependency and hence lowered independence on the one hand, rebellious and defiant behavior on the other.
5. Child-rearing research conclusions related to the development of conscience:
   a. The more the control of the child is love-oriented, rather than based on physical punishment, the more effective is the parents' control over desired behavior and the stronger the development of the child's guilt feelings for improper behavior.

b. The less the parental warmth and identification or the more the parental punishment, the slower the development of conscience.

c. The stages in the development of the child's "moral judgment" appears to be these: (Piaget)
   (1) nonrecognition of rules.
   (2) recognition of rules as absolute and morally correct.
   (3) recognition of the conventional (arbitrary, agreed-upon) character of rules.
   (4) manipulation of and recognition of the changeability of rules.

d. The less consistent the parents' teaching of moral values, or the more perceived inconsistencies between their teaching and their behavior, the slower and weaker the development of conscience.

6. Child-rearing research conclusions related to the development of ambition and need for achievement:
   a. Parental pressure for and reward for early achievement, when coupled with a high ratio of successes to failures, results in a high need for achievement in later life, provided that the child has a good identification with his parents.
   b. The more reasonable the demands made on the child (i.e., the more appropriate to his capacity), the more he will persist after achievement.
   c. The more the physical demonstration of affection as a reward for fulfilling demands for independence, the stronger the drive for achievement.
   d. The earlier the parental demands for achievement, the stronger the subsequent drive for achievement.
   e. The less restrictive and protective the parents, the more likely is the independent achievement of children.
   f. Children from achievement-oriented homes excel in planfulness and performance, but they are also more aggressive, tense, domineering, and cruel.

7. Child-rearing research conclusions related to the development of aggression:
   a. The more severe the punishment for aggression in early childhood, the more direct or indirect expression of aggression later (indirect through fantasy), and the greater the subsequent anxiety about aggressive acts.
   b. The more parental rejection, over-protection, inconsistency, or conflict there is in rearing the child (and, inferentially, the more frustrating the child's home situation), the more marked are his aggressive tendencies.
   c. The more lenient parents are in tolerating their children to show aggression (particularly physical) against them (the parents) the more likely it is that the children will be aggressive toward other people, too.
   d. Punishing a child for aggression with aggression serves only to encourage that child to be more aggressive.

8. Child-rearing research conclusions related to socialization practices in general:
    a. The closer the correspondence between socializing agencies (home vis-a-vis school or parents vis-a-vis peers), the more securely and the more rapidly the socialization takes place.
    b. As between primitive and advanced societies (at least as the latter group is represented by the United States), the more primitive are generally more lenient in their child-rearing practices.
    c. First born children tend to be more serious, less carefree, and more likely to be problem children than later-born children. First borns (at least in our society) also tend to have a high need for achievement, to be more anxious, more dependent on others, especially in anxious situations, and more inclined to go along with the group than are other children.
    d. Youngsters who are loved for themselves alone seem to be better adjusted than those whose parents consider them as show-pieces.

H. The Growth and Development of Attitudes.

1. Attitude defined: A state of readiness to respond toward a person, object, or institution in a positive or negative fashion. Attitudes may be primarily intellectual (based on appreciation of feeling).
2. Psychologists generally agree that attitudes:
    a. are fairly consistent and stable over time.
    b. are acquired by learning.
    c. have direction--i.e., either in favor of or against something.
    d. imply a subject-object relationship--i.e., they are held by an individual toward an object, person, or institution.
    e. have intensity of strength or feeling.
    f. have perceptual and affective components, i.e., assist in determining what the individual sees as well as how he sees it.

I. Research Conclusions Related to How Attitudes Are Developed.

1. Attitudes are developed in order to satisfy needs.
2. Wishes and ideals affect attitudes and behavior--e.g., young children are concerned with material things, such as pets, athletic equipment, and bicycles. Adolescents' wishes are concerned with personal improvement, security, ambition, and vocational aspirations.
3. Attitudes are developed through imitative behavior, but whether the imitative behavior is internalized depends on its being rewarding to the individual.
4. Attitudes are developed through the slow process of identification with various models--e.g., children grow to have many of the same attitudes their parents (models) did.

5. Generally, one acquires attitudes consistent with his self-concept.
6. Attitudes develop as a result of experience. A negative attitude toward school often follows a consistent number of experiences of failure. Similarly, experiences of success tend to produce positive attitudes toward school.
7. Attitudes and interests are often chosen to be acceptable to one's peer group and may even be negative, according to adult standards.
8. Environmental opportunities and limitations affect the acquisition of attitudes.
9. Culture plays an important role in shaping attitudes.

J. Generalizations from Research Related to How Attitudes Can Be Changed and Modified.

1. Attitudes are more likely to be formed and to change when the information upon which they are based comes from someone the listener perceives as having high status and credibility.
2. Strong emotional appeals, based on fear, have not proven to be effective in the long-range change of attitudes.
3. Group discussion is more effective in changing attitudes than lectures.
4. Attitudes are more likely to be changed among those who have had more education and are capable of critical thinking when both sides of an argument are presented. One-sided presentations are more effective in changing the attitudes of less-well educated individuals.
5. Direct experience as a source of information for attitudes may be a highly effective change agent, particularly when that experience is dissonant with previous beliefs and expectations.
6. Reference groups with which students identify (particularly their immediate peers) provide fertile soil for the development and change of attitudes.
7. Persuasible periods in a person's life (times when he is most receptive to new attitudes) come at transition or crisis points such as experiencing a failure of some kind, going from grade school to junior high, or from high school to college, or suddenly realizing one is not as competent as he thought he was.
8. Classroom atmospheres which allow for both face expression and admission of error without loss of status or self-esteem are more conducive to attitude changes than classrooms which do not encourage this.
9. When by force of circumstance a person is made to espouse an attitude discrepant with his own private attitudes, such as playing a role antagonistic to his own beliefs, his attitudes are likely to shift.
10. The amount of information a student possesses on race, politics, and international affairs will be positively related to his assuming more liberal attitudes.

11. Once developed, attitudes tend to resist change, expecially when they are part of the anchor system of the individual's personality structure. Generally, a relentless and systematic but subtle campaign is more effective to change strategy than an incidental approach or head-on attack.

12. The development of attitudes (and values) is best explained through a multiple approach, i.e., attitudes may be the outcome of imitation and of identification with significant persons and they may also occur as the result of deliberate teaching or exist as by-products of emotionally toned experiences.

K. The Measurement and Nature of Intellectual Development and Creativity

1. The nature of intelligence
   a. Although there is no single universally accepted definition of intelligence by psychologists, such phrases as composite of abilities to grasp relationships, abstract reasoning, ability to learn, ability to solve problems, effectiveness in dealing with one's environment, ability to manipulate symbols, ability to act purposefully, etc., tend to be frequently used when intelligence is defined.
2. Theories of intelligence and intellectual functioning
   a. Alfred Benet (French physician who developed the first test of intelligence) described intelligence as:
      (1) the ability to take and maintain a definite direction.
      (2) the capacity for objective self-criticism.
      (3) the capacity to make adaptations for the purpose of attaining a desired end. When these capacities were translated into observable behavior in test items, the following areas were emphasized:
         (a) judgment.
         (b) comprehension.
         (c) reasoning.
         (d) perceptual skills.
         (e) sensory skills.
   b. Carl Spearman's two factor theory divided mental functions into two parts consisting of:
      (1) a "g" factor (general factor) which was common to all mental functions.
      (2) "s" factors (specified factors) which were specific to given tasks.
   c. E. L. Thorndike's multiple factor theory classified intelligence into three major categories known as:
      (1) abstract intelligence, the ability to deal with ideas and symbols.
      (2) mechanical intelligence, the ability to deal with mechanics and things.
      (3) social intelligence, the ability to deal with people.

d. L. L. Thurstone's primary mental ability theory rejected the idea of a general factor in intelligence and postulated that intelligence was composed of a number of primary abilities known as:
   (1) verbal.
   (2) numerical.
   (3) spatial.
   (4) word fluency.
   (5) inductive reasoning.
   (6) deductive reasoning.
   (7) memory.

e. J.P. Guilford's structure of the intellect conceptualizes the intellect according to three dimensions:
   (1) the process or operation performed: cognitive, memory, convergent thinking, and evaluation.
   (2) the kind of material or content: figural (i.e., concrete intelligence), symbolic or semantic (abstract intelligence), and behavioral (social intelligence).
   (3) the kind of product resulting from the application of certain operations on certain kinds of content.

f. D. Wechster (constructed the first individual standardized intelligence test for adults) defined intelligence as a global or aggregate capacity for the individual to:
   (1) act purposefully.
   (2) think rationally.
   (3) deal effectively with his environment.

g. J. Piaget's three main stages of mental development:
   (1) sensori-motor control (birth to age two) i.e., the infant reacts to each object on the basis of its physical characteristics--symbolic activity is at a minimum.
   (2) concrete operations (age 2-12) i.e., involves a gradual increase in the child's ability to extract concepts from experience and to gain control through anticipation of consequences--includes three subphases:
      (a) a preconceptual phase (age 2-6) during which objects gradually take on symbolic meaning--e.g., a bottle as a source of milk.
      (b) an intuitive stage (age 6-8), during which the child's concepts become more elaborate and complex--e.g., child gradually shifts from seeing a tall and narrow jar as containing more candy than a shorter but wider jar, i.e., from equating tallness with bigness to a greater appreciation of the concept of the conservation of quantity.
      (c) a stage of concrete operations (age 9-11) during which the child is still handicapped in dealing with abstract concepts and prefers concrete objects.

3. Kinds of tests used to measure intelligence.
    a. Group (e.g., California Test of Mental Maturity) and individual tests (e.g., Stanford Benet or Wechsler-Bellevue).
    b. Verbal (i.e., the manipulation of puzzles, designs, and symbols).
    c. Speed (i.e., ability to finish a task correctly with minimum amount of time) and power tests (i.e., the extent of one's range and depth of information and understandings).
4. We cannot measure intelligence directly but must estimate it indirectly through performance on tasks calling for intelligent behavior. As a result, we measure ability rather than capacity, what has been learned rather than what can be learned--although we can infer and predict learning potential on the basis of intelligence test performance.
5. Mental age--a concept used to denote the mental development of an individual in comparison with the average of a large sample of people of the same chronological age--e.g., a 10 year old of average intelligence would have a mental age of 10.
6. Intelligence quotient (I.Q.) is a concept indicating an index of brightness (I.Q. = $\frac{M.A.}{C.A.}$ X 100).
7. Research conclusions regarding the characteristics of mental growth and intellectual performances
    a. Mental development involves an increase in the ability to deal with symbols, particularly abstract symbols, in manipulating the environment.
    b. Probably no other aspect of growth reveals more clearly the child's mental development than his ability to use the language. This development, as with other forms of development, is most rapid during the early years, with his spoken vocabulary growing from about 100 words at age two to some 2500 words at age five.
    c. The feebleminded child is always late in talking whereas the child who talks early is almost always of above-average intelligence. The reverse statement cannot be made--e.g., although the gifted children studied by Terman talked some four months earlier than average, some did not talk until they were two or even three years of age.
    d. Although mental development involves an increase in memory, the child's memory is far from reaching its peak.
    e. There is an increase in reasoning ability, which continues to grow as he expands the range of his experience and increases his vocabulary.
    f. Attention span and the ability to concentrate increase as mental development occurs.
    g. Generally and genetically speaking, like will tend to beget like.
    h. The correlations between the intelligence of non-twin siblings are about .50, about .60 for fraternal twins and about .90 for identical twins.

i. Twenty percent of the intelligence measured at age 17 has developed by age one, about 50 percent by age four, about 80 percent by age eight, and 92 percent by age thirteen. For the greatest change in measured ability to occur, the environmental changes should be introduced by age five. Extreme environments in the first four years of life may affect the development of intelligence by an average of 2.5 I.Q. points per year. This drops to 0.4 I.Q. points per year after age eight. (B. Bloom)

j. Firstborns tend to have a higher need for achievement than subsequent children in the same family and they also tend to score higher in tests of verbal intelligence. (In tests of quantitative or mathematical ability there is no connection to birth order.)

k. Mental growth tends to be relatively constant until the early teens and then it tapers off, eventually reaching a peak in the middle twenties, and finally undergoing a gradual accelerating decline. (The age at which intellectual growth reaches its peak revolves around the question of what we mean by intelligence.)

l. The role of mental development among individuals may vary widely because of:
   (1) an individual's pattern of development.
   (2) nutrition and health conditions.
   (3) psychological and social forces in the environment.
   (4) the nature of the test used to evaluate mental growth.

m. The I.Q. is relatively constant under the usual environmental conditions confronting the average person. However, research shows sizeable changes in I.Q. over a period of years. Some of the reasons for fluctuations are:
   (1) unreliability of the test.
   (2) use of tests with different content.
   (3) lack of cooperation of the testee.
   (4) fatigue, lack of motivation, emotional blocks.
   (5) practice effects.
   (6) growth factors.
   (7) errors inherent in the test.
   (8) change in environment.
   (9) personality factors.
   (10) errors of the measurer.

n. If mental test scores do change during childhood and adolescence, the changes tend to be in the direction of the family norm as indicated by the parents' education and socio-economic status--i.e., children with middle- and lower-range I.Q.s tend to have higher I.Q.s as they grow older if they live in families with upper-middle class status, headed by college-educated parents. Children who have middle- to high-range I.Q.s tend to have lower I.Q.s if they grow up in surroundings with parents who have limited education.

        o. I.Q. increases among elementary school boys are frequently correlated with such personality traits as independence, aggressiveness, self-initiation, interest in problem-solving, and competitiveness.
        p. As near as can be inferred from research at this time is that heredity sets an upper limit on intelligence and environment determines the degree to which the person approaches this limit.

8. Research conclusions regarding the relation of creativity to intelligence.
    a. Intelligence and creativity are not synonymous--e.g., roughly two thirds of the top 20 percent in creativity in various student populations do not qualify in the top 20 percent on the intelligence scale, while, conversely, roughly two thirds of the highly intelligent do not qualify as highly creative.
    b. Teachers tend to exhibit a preference for high I.Q. students even though the "creative" equaled the "intelligent" in academic performance despite a substantial I.Q. handicap.
    c. Personality characteristics found to be postively correlated with creativity are:
        (1) basic security
        (2) flexibility
        (3) spontaneity
        (4) sense of humor
        (5) playfulness
        (6) radicalness
        (7) tolerance of ambiguity
    d. Personality characteristics found to be negatively correlated with creativity are:
        (1) neatness
        (2) rigidity
        (3) control
        (4) thoroughness
        (5) reason
        (6) respect for tradition and authority
    e. Psychological safety and freedom are essential to the encouragement of creativity.
    f. Teachers who encourage creative "divergent" thinking produce more creative student behavior than teachers who do not.

L. Self-Concept: Its Nature and Nurture.

1. Self-concept defined: It is that part of each person which is born out of his awareness of who he thinks he is. Self-concept serves as an organizing core within which a system of ideas attitudes, values, and commitments grows consistent with one's couscious idea of who he is. Ultimately, the self is that which constitutes each person's inner world as distinguished from the outer world consisting of all other people and things.

2. Research conclusions regarding the general nature of the self:
    a. The self develops out of one's interaction and communication with the environment; it is a social product.
    b. One's perceptions of himself and his environment strongly influence his behavior.
    c. Each individual's continuous struggle to maintain and enhance the perceived self is the basic motive for all behavior; hence, people are always motivated.
    d. The self strives for consistency and behaves in ways which are consistent with itself--i.e., a person cannot help but be himself and feels uncomfortable when he is not himself.
    e. Learning is more rapid if it is perceived by the learner as related to positive aspects of the self.
    f. The self determines what is perceived, and the closer the experience to the self, the greater its effect.
    g. The self can be learned (for better or for worse) through school experiences.
3. Some research conclusions related to relationships between self-concept and school achievement.
    a. In terms of their perception of self, students have a definite commitment to perform as they do. Other things being equal, those who do not achieve choose not to do so, while those who do achieve choose to do so.
    b. A significant positive relationship was found between immature self-concepts and reading disabilities in a third and sixth grade class.
    c. A significant positive relationship was found between high self-concepts and school achievement in fifth and sixth grade children.
    d. A significant positive relationship was found between self-concept of ability and school achievement over a six year period from grade 6 through grade 12.
    e. Measures of self-concept made at the beginning of kindergarten were found to be more predictive of reading achievement two and one-half years later than were measures of intelligence.
    f. Achieving students feel more positively about themselves than underachievers.
    g. Low academic achievement may be related to a student's conception of himself as unable to learn a certain kind of material.
    h. Teachers who expect greater or higher academic performance from their students are more likely to have high performing students than teachers who have low expectations for their students.
    i. Students tend to mold their self-concepts according to the way they think their teachers (and other significant people) regard them.
    j. When a person resists learning (of any kind) that would be beneficial to him, it may be because he is trying to safeguard his concept of self; even though his self concept may be false and unhealthy, but it is the only one he knows.
    k. General research conclusion. Underachievers sadly underestimate themselves.

4. Research conclusions regarding the consistency of self-concept and general personality characteristics over time.
   a. Because a child's image of himself tends to continue developing in the direction in which it started, early childhood is the critical period in the development of the self-structure.
   b. The more intensely any given behavior is rewarded and reinforced during the early years of life the more likely it will be to persist into later life and the more resistent it will become to change.
   c. Since each individual's behavior is governed not only by the physical aspects of the situation in which he finds himself but by his perceptions as influenced by his previous experiences, he relies more and more upon past patterns of behavior. This consistency is not voluntary or deliberate, but compulsive, and generally is outside of awareness.
   d. Generally, a person perceives only those things which are consistent with his motives and goals and he interprets his experiences to make them compatible with his self-concept--e.g., a hostile person is more likely to see hostility in others.
   e. Personality characteristics and traits observed in preschool children are remarkably similar to the characteristics and traits of these same youngsters in later adolescence.
   f. Personality characteristics of psychotic patients are stable and evidence continuous development from childhood.
   g. When inconsistent perceptions are held by a person, either about himself or his environment, he is placed in a state of tension called "psychological dissonance" (Festinger), which he must then alleviate or dissipate by bringing his cognitions closer together.
   h. If a student perceives his teacher (or some other significant person) as having low expectations for his (the student's) academic performance, he will tend to behave in a manner consistent with those expectations--i.e., he is likely to achieve at a low level.
   i. Consistency is in the perception, not the overt action--e.g., the fearful child at age one screams a great deal; the same child at two is less vocal, but runs away from threatening situations; or to the crook, money is something to steal; to the miser, something to hoard; to the gambler, something to speculate with; to the child, something to buy candy with, etc.
   j. General research conclusion: All individuals develop characteristic ways of dealing with material presented to the senses, irrespective of content and sensory modality. This "perceptual style" or "perceptual attitude" is apparently an important source of unity and consistency within the personality; it cuts across specific expectancies, specific defense mechanisms, and complexes. One's perceptual style is consequently a factor making for a characteristic way of dealing with the environment which is an identifying feature of the unique personality.

5. Research conclusions regarding changes in self-concept.
   a. The greater the pressure to change a person, the more likely it is that he will divorce his behavior from his personal conviction--i.e., he may say he agrees with you, but his behavior is not likely to change.
   b. If, through mild pressure or reward, a person was induced to do something contrary to his self-concept, he is more likely to alter his self-concept in the direction of his spoken opinion or overt action--e.g., if a student who considered himself a poor speaker was in some low-pressure fashion induced to speak out in class, he might improve his conception of himself as a speaker.
   c. If behavior contrary to one's self-concept is likely to be publically known by important other people, then the predicted self-concept change will be greater than if the consequences remain public.
   d. Shifts of value in facets of the self-concept will occur when an individual is forced to choose behavior that relates to and supports one facet, but excludes another--e.g., if one must choose between two equally attractive objects or experiences, the value of the unchosen one as related to his self-concept will likely change in a negative direction. Conversely, the value of the one chosen is likely to become greater.
6. Research conclusions related to self-concept and personality adjustment.
   a. Self-accepting individuals generally see the world as a friendly and more benign place than the self-rejecting individual.
   b. Children who are objectively successful, but who regard themselves poorly, are usually more popular, better academic achievers although more self-critical, and more ambitious. (These youngsters appear to take it out on themselves but remain well-regarded by both teachers and peers.)
   c. Although a high self-concept person may be highly accepting of others and estimate his popularity higher than a low self-concept person, he may not actually be any more popular. Research suggests that because the "prototypic well-adjusted person" (i.e., one with high acceptance of others as well as self) may not appear to "need" friendship or to repay it, his very psychological robustness is resented, or perhaps it is perceived and interpreted as a Pollyanna-like facade.
   d. The greater the self-ideal discrepancy, the less adequate the adjustment.
   e. Good-accurate self-concepts are more closely associated with good adjustment than poor-accurate ones.
   f. If an excess of self-esteem is compensatory in character (developed to cover an inner feeling of inferiority), this failure to achieve popularity forces the individual to act even more blatantly, just as the behavior of the insecure individual often increases his insecurity.

3

g. Although there does not seem to be a very close correlation between security and self-esteem, the interrelations of the two can be best understood in their extreme combinations: (A. Maslow)
  (1) high security, high self-esteem; this person has strength and affection for fellow man and behaves in a kindly, protective fashion.
  (2) low security, high self-esteem; this person has strength, but feels hostility and fear of others, and is likely to behave in a ruthless, sadistic manner.
  (3) low security, low self-esteem; this is the masochist, or "bootlicker" or "apple-polisher."
  (4) high security, low self-esteem; this is the quiet, sweet, dependent personality.

h. A person with a well-developed philosophy of life is less perturbed by frustrations and disappointments than are others--i.e., he is better able to put events and experiences into proper perspective without having his judgment obscured by viewing things at short range.

i. When anxiety or threat is too great a person is no longer able to remain flexible enough to choose among the multiple alternatives that might otherwise exist under less threatening conditioning--i.e., threat acts to produce "tunnel-vision."

j. In Western culture the self seems to acquire through social pressure an upward tendency, a need to be evaluated highly.

k. An individual's evaluation of himself as dominant or submissive, emotional or calm, sociable or seclusive, will be dependent to some extent upon the group with which he consciously or unconsciously compares himself.

l. The way an individual sees himself serves as an anchoring framework in the way he sees others. An individual will tend to see other people in terms of similarity to self--e.g.,
  (1) An individual does not accurately perceive characteristics that are part of his self-concept in
    (a) others toward whom he has a negative attitude and who are similar in these characteristics.
    (b) others toward whom he has a positive attitude and who are dissimilar in these characteristics.
  (2) Males and females have similar SA-SI discrepancy patterns but females have a smaller congruence between SA and social self. In college women, this might be interpreted as a conflict between personnal strivings of the college woman and either present social standards or introjected values.

m. Persons of high self-esteem tend to protect themselves against unfavorable evaluations better than low self-esteem persons.

n. Persons with high self-esteem exert more influence attempts than persons of low self-esteem in interaction situations.

o. Persons with high self-esteem may be more resistant or less open to new information than persons of low self-esteem.

p. People with low acceptance of self report, on average, twice as many physical complaints as people who are high in their acceptance of self.

q. When given tasks to perform, people with low acceptance of self underestimate their performances more than people with high acceptance of self. In addition, when people with low acceptance of self are asked to comment on their performances, they look within themselves for explanations of their failures and feel negative toward their performances. People with higher acceptance of self are more positive about their performances and blame external circumstances for their failures. Finally, when people with low acceptance of self are asked to recall their performance at a later date, they underestimate, but people with higher self-acceptance overestimate.

r. People with low acceptance of self blame themselves for their unhappiness in life, whereas, people with higher acceptance of self blame circumstances and people, or a combination of others, self, and circumstances.

s. General research conclusion: Good self-concepts are associated with characteristics as low anxiety, generally good adjustment, curiosity, popularity, effectiveness in group relations but relative independence from the group--i.e., close group affiliation seems less important to individuals with high self-concepts than to people with low self-concepts.

7. Six criteria of a positive self-concept as indicated from research evidence: (P. M. Symonds)
   a. Toleration of external threat--i.e., ability to accept disappointment, bear physical discomfort, and function efficiently while subject to fear of physical injury.
   b. Dealing with guilt feelings--i.e., can work out compromises in behavior so that needs are satisfied without excessive guilt.
   c. Capacity for effective repression--capacity to recognize and live with the idea that antisocial impulses may exist.
   d. Balance of rigidity and flexibility--i.e., since one who is too flexible is affected by the slightest environmental change, he is less likely to maintain a persistent course of action. If he is too rigid he cannot profit by new opportunities and learnings. A balance between the two is ideal.
   e. Planning and control--i.e., can make plans and then maintain a course of action to execute the plan.
   f. Self-esteem--i.e., the individual who genuinely perceives himself as worthwhile has a stronger sense of self than one with feelings of inferiority.

8. Research shows that individuals who have low self-concepts and self-devaluating attitudes are characterized by some, but not necessarily all, of the following kinds of behavior:
   a. Lacking in spontaneity and uniqueness, inept in responding to teasing and kidding.
   b. Shows numerous neuromuscular tensions.

    c. Associate with persons considerably below themselves in personality, maturity and general intelligence.
    d. Do things in the nature of "bootlicking" for people of high prestige-status.
    e. Engage in some kind of appeasement or apologetic behavior toward those whom they think they have offended.
    f. Generally give in to others when opposed.
    g. Make frequent self-derogatory remarks.
    h. Find it difficult to accept compliments.

9. Research conclusions related to the facilitation of motivation and learning through self-concept enhancement suggests that teachers must:
    a. understand that they teach what they *are*, not just what they *say*.
    b. understand that anything they do or say could significantly change a student's attitude about himself for better or for worse. Further, they must understand the implications of our role as persons who are important or "significant" to students if they are to utilize that role properly.
    c. understand that students, like anyone else, behave in terms of what seems to be true, which means that many times learning goes on, not according to what the facts are, but according to how they are perceived.
    d. be willing not just to teach subject matter, but to deal with what the subject matter *means* to different students. In the truest sense of the word, they must be as willing to deal with the *interpretation* of a subject as they are to deal with the *information* about it.
    e. understand that they are not likely to get results simply by telling someone he is worthy. Rather, they imply it through trust and the establishment of an atmosphere of mutual respect. One good way to start is to take time to listen to what the students have to say and to use their ideas when possible.
    f. understand that teacher behavior which is distant, cold, and rejecting is far less likely to enhance self-concept, motivation, and learning than behavior which is warm, accepting, and discriminating.

VI. THE PSYCHOLOGY AND EDUCATION OF THE CULTURALLY DISADVANTAGED.

A. Census Estimates (1960) of the Population by Social Class (based on occupational classification).

1. About one-fourth of the adults are lower-class.
2. Almost one-third of the adults are upper lower class.
3. Fewer than two-fifths of the adults are middle and upper class.
4. Since there is a tendency for lower-class families to have more children than middle- or upper-class families, it is estimated that roughly two-thirds of the pupils attending elementary school come from lower-class homes, many of which are seriously disadvantaged.

B. General Characteristics of Disadvantaged Areas.

1. Percentage of broken homes almost three times as great as total county.
2. Family income 25 percent below county median.
3. Population density approximately double that of entire county.
4. Housing is substandard, and continues to decline in quality.
5. School dropout rate over twice as large as the average for the city.
6. Youth delinquency rates are higher in almost all offense categories than for the county generally.

C. Research Conclusions Related to the Social, Psychological, and Academic Characteristics of the Culturally Disadvantaged.

1. They are relatively slow at cognitive tasks, but not stupid.
2. They appear to learn most readily through a physical, concrete approach (often slow, but may be persistent if content is meaningful and valued).
3. They often appear to be anti-intellectual, pragmatic rather than theoretical.
4. They are often traditional, superstitious, and somewhat religious in a traditional sense.
5. They are inflexible and relatively closed to reason about many of their beliefs (morality, diet, family polarity, and educational practice are examples of these beliefs).
6. They feel alienated from the larger social structure, with resultant frustration.
7. They hold others to blame for their misfortunes.
8. They appreciate knowledge for its practical, vocational ends, but rarely value it for its own sake.
9. They desire a better standard of living, but do not wish to adopt a middle-class way of life.
10. They are deficient in auditory attention and interpretation skills.
11. They read ineffectively and are deficient in communication skills generally.

D. Research Conclusions Related to Language Patterns of Disadvantaged Children.

1. They understand more language than they use, although at grade two the vocabulary of such children is approximately one-third that of normal children, while at grade six it is about one-half.
2. They frequently are crippled in language development because they do not perceive the concept that objects have names, and that the same object may have different names.
3. They use the language chiefly to express concrete needs and by kindergarten they express themselves with fewer words and with less variety than do kindergarten children of higher socioeconomic classes.
4. They use a significantly small number of mature sentence structures, such as compound, complex, and more elaborate constructions.

5. They frequently come from a milieu in which the radio, television, and the sounds made by many people living in crowded quarters provide a background of noise from which they must retreat and they therefore learn less from what they hear than do middle-class children.

E. Research Conclusions Related to Learning Patterns of Disadvantaged Children.

1. They tend to learn more readily by inductive than by deductive approaches--i.e., low self-esteem, induced by long economic deprivation, discrimination, or both, may cause pupils to mistrust their own judgment or conclusions; they may need a more authoritorian figure to help support them.
2. They are unaccustumed to "insight building" by external use of lectures and discussions at home--i.e., they usually have had little opportunity to move from observations to conclusions through discussion.
3. They are frequently symbolically deprived--i.e., imaginary playmates and fantasy is frequently frowned on by parents of culturally deprived children because it is viewed as "lying".
4. They need to see concrete application of what is learned to immediate sensory and topical satisfaction. (This is of particular importance in a school culture in which the primary emphasis is placed on long-term goals, which can be met only by foregoing immediate satisfactions.)
5. They tend to have a poor attention span and subsequently experience difficulty in following the orders of a teacher.
6. They seem generally unaware of the "ground rules" for success in school settings--i.e., have difficulty knowing when to talk or when not to, when to play and when not to, etc.
7. They tend to have difficulty knowing the concept of relative size.
8. They are less likely to perceive adults as people they can turn to for help--i.e., they perceive adults as people who cope with them, not help them.
9. They seem to have a low level of curiosity about things.
10. They have only a very narrow range of experiences--e.g., many have never seen a cow, or duck, or resturant, etc.

F. Research Conclusions Related to Readiness for Instruction of Disadvantaged Children.

1. They usually enter school from a background which has not adequately prepared them for success in a traditional curriculum.
2. They generally have had little experience of receiving approval for success in a task.
3. They are characterized by narrow experience outside the home and this is reflected in scores on intelligence tests--e.g., children who might get I.Q.'s of around 100 in an enriched environment, would be expected to receive I.Q.'s of around 80 in an impoverished one.
4. They have a low need for academic achievement because this has not been reinforced or encouraged in their early life experience.

G. Guide lines in Instructional Approaches for the Disadvantaged.

1. Personalize. The line of communication is the student rather than the subject, the warmth and tangibility of "you" or "we" rather than "they" or "the".
2. Orient to job experience or world of work. It is within the context of seeking short range, immediate goals--some vocational competence that stands the pragmatic test of usefulness in real life.
3. Use present and current events as basis for understandings. Most academic subjects have meaning only insofar as they help explain the present-day world.
4. Adapt or arrange text materials to fit reading levels, interests, and needs.
5. Correlation with more than one subject area. Relationship among areas will not only suggest additional instructional approaches, but will encourage teachers to operate in teams, pooling information and ideas.
6. Stress oral communication. Unless oral communication is stressed, the disadvantaged state is frozen into permanency.
7. Work for standards. Self-esteem grows from accepting responsibility and disadvantaged should be held accountable and encouraged to accept responsibilities.
8. Organize short, achievable units. Many reinforcements and rewards along the way are better than one major payoff at the end.
9. Build in elements of success. This does not mean designing for easiness--a practice that is self-defeating; it does mean planning a variety of academic experiences so as to put success within the reach of every student.
10. Provide for exploration and discovery, including how to think. The emotional approach and response, so largely responsible for many distortions held by the disadvantaged, should gradually be replaced by the more rational judgment and analyses.

H. Summary of Research Conclusions Regarding Specific Practices Found to Be Most Effective Teaching the Disadvantaged.

1. Using substantially more praise than reproof.
2. Extensive use of audio-visual aids.
3. Using students' experiences to stimulate interest.
4. Giving students many chances to apply what they learn.
5. Using small-group instruction.
6. Using projects in which the students evidence interest.
7. Keeping students carefully informed as to their progress.
8. Emphasizing vocational values in materials studied.
9. Use of school and/or community resource people.
10. Doing some of the classwork planning with students.
11. Encouraging some competition with the class.
12. Being firm or supportive as situation demands.

VII. MENTAL HEALTH IN THE CLASSROOM.

A. Extent of the Mental Health Problem Among Elementary Students.

1. Research shows that out of 100 elementary school children picked at random:
    a. four or five will spend their lives in mental hospitals.
    b. four or five will develop serious mental illness but will be cared for in special instititutions.
    c. one or two will commit some major crime and spend time in jail.
    d. three or four will be so handicapped by retarded or stunted mental devleopment they will not be useful, productive citizens.
    e. 30 to 50 will fail to reach maximum efficiency and happiness because of a variety of unsolved emotional problems.
2. Mental health research indicates that approximately 25 percent of children and youth in American schools are sufficiently maladjusted to require professional care or therapy.
3. Hierarchy of the most common problems faced by elementary school children in grades 1-8
    a. scholarship difficulties.
    b. reading difficulties.
    c. social behavior problems.
    d. speech problems.
    e. health problems and physical disabilities.
4. Seven of the most common reasons for psychological referral among elementary school children (no one more common than any other)
    a. restlessness, inability to sit still.
    b. doesn't know how to have fun, behaves like little adult.
    c. crying over minor annoyances and hurts.
    d. dislike for school.
    e. temper tantrums.
    f. excessive daydreaming.
    g. uncooperativeness in group situations.

B. Factors Having a Direct Bearing on the Mental Health of School Children.

1. The wide range of individual differences in the classroom makes it difficult for the teacher to provoke meaningful experiences for each child and to have each attain at least minimum satisfaction of his needs--e.g., for every child frustrated because the material is too difficult, there is likely to be another frustrated because the work is too easy; and any number who are bored because the material bears no relation to their goals and purposes.
2. Discipline in the sense of setting limits or guidelines is essential for promoting the security necessary for optimal development. It must be constructive; nothing is gained from cataloging in a rigid, moralizing manner the child's failures to meet adult standards.

3. The most important single factor in the mental health picture is the teacher's ability to generate warm pupil-teacher and pupil-pupil relationships based on understandings, mutual respect and acceptance.
4. A meaningful curriculum taught in a meaningful way can do more for the child's mental health and all-around growth than any program of guidance or special help superimposed upon a rigid instructional program supervised by inflexible and authoritarian teachers.

C. Five General Behavioral Patterns Indicative of Possible Maladjustment.

1. An inability to learn which cannot be adequately explained by intellectual, sensory, neurophysiological, or general health factors.
2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
3. Inappropriate or immature types of behavior or feelings under normal conditions.
4. A general pervasive mood of unhappiness or depression.
5. A tendency to develop physical symptoms, such as speech problems, pains, or fears, associated with personal or school problems.

D. Specific Behavioral Patterns Symptomatic of Possible Maladjustment.

1. Withdrawing, retiring, reticent behavior.
2. Shy, timid, self-conscious, fearful behavior.
3. Serious, thoughtful behavior.
4. Refusal to recognize real condition, concealment, delusions.
5. Feelings of inferiority.
6. Emotional and psychosexual maturity.
7. Friendless, isolated, asocial behavior.
8. Paranoid reactions, sensitivity, suspiciousness.
9. Craving for affection, love of praise, seeking attention, being too dependent.
10. Goals unrealistically high.
11. Extremely aggressive, competitive behavior.
12. Anxiety, tension, nervousness, temper tantrums.

E. Criteria for Deciding Which Children to Study.

1. The degree to which present behavior is likely to affect adversely a child's development.
2. The amount of help the child will probably need in solving his problems.
3. The amount of competence the teacher has in dealing with such problems.
4. The degree to which the problem behavior interferes with the work of the teacher and the class.

F. Considerations Regarding Classroom Discipline.

1. Criteria for when teachers should actively interfere with behavior:
   a. When there are reality dangers--e.g., fighting, playing with matches, throwing rocks, etc.
   b. When psychological protection is needed--e.g., preventing scapegoating or derogatory race names, etc.
   c. When there is a need to prevent too much excitement--e.g., if a game is getting out of hand and tempers are flaring.
   d. When property needs protecting--e.g., school equipment or property.
   e. When an on-going class program needs protecting--e.g., one or two children should not be allowed to upset an entire class's activity.
   f. When a negative contagion begins to develop--e.g., if teacher is aware that tension is mounting in a classroom and a student with high social status begins tapping his desk with a pencil, the teacher should ask him to stop to prevent the behavior from spreading to other students.
   g. When a value area or school policy needs highlighting--e.g., explaining why everyone can't be first in line or why students should walk, not run, down hallways.
   h. When a conflict with the outside world is to be avoided--e.g., expecting more control on the part of students when they are attending an assembly or are on a class trip than when they are in the classrooms.
2. Influence techniques to help manage surface behavior (Redl and Wattenberg).
   a. Planned ignoring--e.g., ignoring the misbehavior if the child is only trying to get attention (or the teacher's goat) so long as it does not spread to others.
   b. Signal interference--i.e., non-verbal techniques such as eye contact or hand gestures can be effective at the beginning stages of misbehavior.
   c. Proximity control--i.e., moving close to the child who is misbehaving.
   d. Interest boosting--i.e., helping a student re-establish his motivation may be more effective than directly admonishing him for lack of motivation.
   e. Use of humor--i.e., appropriate use of a humerous comment can penetrate tense and anxious situations.
   f. Restructuring programs--i.e., leaving the "lesson plan" and doing something novel and different in an effort to relieve boredom and monotony.
   g. Providing support through routine--i.e., giving enough dependable guidelines so those children who may need more of this feel comfortable and secure. (optimal amount of structure serves to reduce anxiety)
   h. Appealing directly to value areas--i.e., seek to reach students through areas they already value, e.g., an appeal to the child's group code and awareness of peer reaction, i.e., "What do you think the others will think of that idea?"

   i. Removing seductive objects--i.e., removing such things as baseballs, peashooters, flashlights, rubberbands, boxed frogs, etc., prior to beginning a lesson.
   j. Nonpunitive exile--i.e., asking a child to leave the room until he can control himself. There is no intent to punish, but rather to help him or the group get over their feelings of anger, disappointment, uncontrollable laughter, hiccups, etc.
   k. Physical restraint--i.e., holding a child who has lost complete control and threatens to injure himself or others.

3. Research conclusions related to the use of punishment.
   a. Consistent discipline is a potent factor in good character because the child learns that certain behavior will always be followed by punishment, even though it is light punishment.
   b. Punishment is not effective when it cannot be associated with a specific cause.
   c. Punishment is apt to be more effective when it is closely associated in time with the misbehavior which led to it.
   d. In order for punishment to be effective, the child must know for sure that the person doing the punishing likes him. (Otherwise he may simply conclude, "He is doing this because he doesn't like me." and not, as we would hope, "He is doing this because I have done something wrong.")
   e. Any punishment that subjects a pupil to shame and ridicule in front of his classmates is dangerous and ineffective.
   f. The effects and consequences of punishment are not the same for all children--e.g., a spanking or detention to one child may be interpreted as, "No one likes me and here's more proof of it." and by another child as, "People care enough about me to want to help me change."
   g. The nature of the punishment should be a natural outgrowth of the misbehavior--e.g., sweeping up the room for throwing paper wads.
   h. Where corporal punishment is regularly used (as in certain English schools and some American private schools) it is accepted as routine and is no more a deterrent than any other punishment.

4. Basic principles related to the use of classroom discipline.
   a. Be firm but fair.
   b. Don't punish a whole class for the misbehavior of a few.
   c. Never reduce or ridicule a student.
   d. Be consistent.
   e. Be prompt.
   f. Keep the penalty to the minimum that is likely to be effective.
   g. Let the punishment fit the crime.
   h. Be sure that the student understands why he is being punished.
   i. Let bygones be bygones.
   j. Look for the motivations of the misbehavior, not just the manifestations.
   k. Cold, punitive, "tough" teachers may have quiet classes, but they are also likely to turn out angry, hostile students.

G. Techniques for Studying Individual Students.

1. Observe the student's out-of-school environment--i.e., the neighborhood, type of housing, recreational and play facilities etc.
2. Observe students in their informal settings--i.e., their behavior on playground, status in spontaneous play groups, positions in clubs, treatment by and toward other children.
3. Self-expression techniques:
    a. Creative writing--i.e., encourage students to write on themes which have emotional overtones, e.g., "Things I would change about school" or "How I feel about myself."
    b. Unfinished stories--i.e., ask students to write their own conclusions to "unfinished stories" in order to gain some insight into their values and attitudes.
    c. Open-ended questions--i.e., the use of statements like "I wish . . . " or "I dispise . . . " or "I need . . . ," etc. to tap students' feelings about the issues involved.
    d. Autobiographies.
    e. Discussion methods--i.e., the use of free expression times during which students are encouraged to talk about whatever they want.
4. Studying the social relationships of children.
    a. Sociometric devices--i.e., techniques for securing written or oral expressions of friendship through a series of questions which explore different aspects of social interaction, e.g., sociograms and sociodrama.
    b. Guess-who tests--i.e., techniques to elicit from students the names of those who fit a given pattern of behavior, e.g., "Who is most popular?" or "Who is always fighting?" etc.
5. Questions to ask when studying individual students--e.g., what are:
    a. The pupil's concepts of self in relation to school in general and school work in particular?
    b. The pupil's concept of self in relation to teacher(s) and the pupil's concepts of teacher(s).
    c. Your appraisals of the pupil's ability, behavior, etc.?
    d. The pupil's concept of self in relation to his peers and the pupil's concept of his peers?
    e. The other students' concepts of the student in question?
    f. The pupil's concepts of his body?
    g. Your conclusions about his body?
    h. Your conclusions regarding his over-all self-concept? Does he feel secure? Adequate? Does he have particular qualities which vary widely from the general picture?

H. Research Conclusions Related to Group Life and Classroom Discipline.

1. When teachers rely largely on dominating techniques, evidences of conflict are multiplied.
2. When teachers use more cooperation evoking methods, spontaneity and social contributions are more frequent.

3. The longer a class is with a teacher, the greater the effect the teacher has on behavior.
4. When a class changes teachers, the prevailing conditions usually disappear and are replaced by conditions established by the new teacher.
5. In teacher-centered groups, a large proportion of the teacher's responses fall into the following categories:
    a. Directive or hortative statements with the intent to have the student follow a recommended course of action.
    b. Reproving or deprecating remarks intended to deter the pupil from continued indulgence in present "unaccepted" behavior.
    c. Self-supporting remarks of the teacher intended to sustain or justify the teacher's position.
    d. Teacher-centered behavior if directing, demanding, and using private criteria in deprecating a student leads to hostility to the self or teacher and aggressiveness, or sometimes withdrawal, apathy, and even emotional disintegration.
6. In student-centered classrooms, the bulk of the teacher's remarks serves the following purposes:
    a. Student-supportive statements that have the intent of reassuring or commending the pupil.
    b. Acceptant and clarifying statements having an intent of conveying to the pupil the feeling that he is understood and to help him elucidate his ideas and feelings.
    c. Problem-structuring statements or questions which offer information or raise questions about the problem in an objective manner with the intent of facilitating problem-solving.
    d. Learner-centered behavior of accepting the student, being evaluative or critical only by public criteria, and being usually supportive elicit a problem-solving orientation, decreases personal anxiety, can lead to emotional readjusting and integrative behavior.

I. Research Conclusions Related to the Mental Health of Teachers.

1. Implications of teacher maladjustment studies.
    a. From 27-43 percent are unhappy, nervous, dissatisfied, and working under considerable strain.
    b. From 17-49 percent may be classified as maladjusted, although not seriously disordered.
    c. From 9-35 percent are probably in need of psychiatric care.
2. Research suggests that over 3 million youngsters are exposed to teachers who are so unbalanced that they should not be around children.
3. Research has found that male teachers confined in mental hospitals exhibited the following forms of behavior while they were in the classroom (listed in rank order of importance.)
    a. Introversion.
    b. Overambition.
    c. Hyperactivity.
    d. Efficiency.
    e. Neuroticism.

   f. Quiet and shy.
   g. Anxiety.
   h. Irritability.
   i. Selfishness.
   j. Eccentricity.
4. Female teachers confined in mental hospitals exhibited the following behaviors (in rank order of importance).
   a. Overambition.
   b. Hyperactivity.
   c. Efficiency.
   d. Quiet and shy.
   e. Irritability.
   f. Introversion.
   g. Neuroticism.
   h. Anxiety.
   i. Selfishness.
   j. Eccentricity.
5. Symptoms of maladjustment most frequently mentioned by teachers seeking psychiatric or psychological advice (in rank order of frequency).
   a. Difficulty speaking in public.
   b. Discouraged easily.
   c. Feelings easily hurt.
   d. Moody.
   e. Nervous.
   f. Shy.
   g. Disturbed by criticism.
   h. Low self-confidence.
   i. Confused easily.

J. Mental Health and Teaching: Summary Research Conclusions.

1. Maladjusted teachers tend to have more maladjusted students and adjusted teachers have more stable pupils.
2. A teacher's mental health is directly related to what goes on in the classroom.
3. Techniques to encourage teacher self-understanding are one of the best ways to enhance better adjustment among teachers.

```
*OBJECTIVES    TO INTRODUCE THE STUDENT TO THE IDEA OF DEVELOPMENT AS
               DEVELOPMENT OF INCREASINGLY COMPLEX FORMS AND TO PROVIDE
               THE STUDENT WITH A BASIS FROM HIS OWN EXPERIENCE OUT OF
               WHICH HE CAN PERCEIVE HIMSELF WITHIN THIS CONTEXT.          01044040
*PREREQUISITE  NONE                                                        01044041
*EXPERIENCE    INTRODUCTION TO DEVELOPMENT.  THE ESSENCE OF THIS MODULE    01044011
               IS THE IDEA OF DEVELOPMENT AS THE DEVELOPMENT OF            01044012
               INCREASINGLY COMPLEX FORMS.  THE OBJECTIVE IS TO ORIENT     01044013
               THE STUDENT TO SEEING THE PARALLELS BETWEEN BIOLOGICAL,     01044014
               PHYSIOLOGICAL, COGNITIVE AND PERSONALITY DEVELOPMENT        01044015
               WITHIN THIS CONTEXT.  THE INSTRUCTOR SHOULD INTRODUCE THIS01044016
               TOPIC BY ASKING THE STUDENTS TO EXPLAIN TO HIM THE OLD      01044017
               CLICHE THE OLDER ONE GETS, THE LESS ONE KNOWS.  THE         01044018
               RESULTING COGNITIVE DISSONANCE BETWEEN THE OBVIOUS          01044019
               INCREASE IN AN INDIVIDUALS KNOWLEDGE OR BEHAVIOR            01044020
               REPERTOIRE AND UNDERSTANDING OR MATURATION SHOULD THEN BE 01044021
               DIRECTED BACK TO THE STUDENTS OWN EXPERIENCES WITH          01044022
               SUBJECTS OR SITUATIONS WHERE THEIR INCREASE IN KNOWLEDGE  01044023
               AND SKILL IN AREA LED TO AN INCREASED UNDERSTANDING OF ITS01044024
               COMPLEXITY AND THE RESULTING UNDERSTANDING OF ONES SELF OR01044025
               POSITION IN RELATION TO THIS ASPECT.  SUBJECT MATTER        01044026
               SKILLS ESPECIALLY MATH CAN BE DRAWN UPON FOR EXAMPLES AND 01044027
               ESPECIALLY AS THESE AREAS RELATE TO DIFFERENT PERIODS OF  01044028
               TIME.  A CONSTANT RELATIONSHIP SHOULD BE DRAWN BETWEEN THE01044029
               INCREASE IN CAPABILITIES AND THE CHANGE IN FEELINGS.  THIS01044030
               SHOULD LEAD INTO A DISCUSSION OF INCREASINGLY COMPLEX       01044031
               FORMS AS THE SYMBOL OF FORMS OF DEVELOPMENT--SOCIAL,        01044032
               TECHNOLOGICAL, ECONOMIC, EDUCATIONAL, ETC.  THIS            01044033
               DISCUSSION SHOULD END WITH THE INSTRUCTOR SUMMARIZING AND 01044034
               THEN BRIEFLY OUTLINING WHERE THE DEVELOPMENT MODULES WOULD01044035
               LEAD.                                                       01044036
*SETTING       SMALL GROUP 1-12 STUDENTS  COLLEGE                          01044 10
*MATERIALS     BLANK                                                       01044  5
*LEVEL         ALL GRADES                                                  01044  8
*GENERAL       ALL CANDIDATES                                              01044  7
*HOURS         1                                                           01044  6
*EVALUATION    LEVEL AND QUALITY OF STUDENT PARTICIPATION QUALITY IN THIS01044042
               CASE MEANING THE DEGREE TO WHICH THE STUDENT BEGINS TO SEE01044043
               HIMSELF WITHIN THE OBJECTIVE CONTEXT.                       01044044
*FILE          DEVELOPMENT  PERCEPTION  COGNITIVE DISSONANCE               01044  9
```

```
*OBJECTIVES    TO BEGIN THE FORMAL ORGANIZATION OF DEVELOPMENT AS THE      01045029
               DEVELOPMENT OF INCREASINGLY COMPLEX FORMS AND ESPECIALLY  01045030
               TO SHOW THE BIOLOGICAL OR NEUROPHYSIOLOGICAL BASIS OF THIS01045031
               IDEA AND TO INTRODUCE THE NOTION OF NON-FIXED               01045032
               INTELLIGENCE.                                               01045033
*PREREQUISITE  PREVIOUS MODULES ON DEVELOPMENT                             01045034
*EXPERIENCE    DISCUSSION AND CONTENT RELATING TO THE BIOLOGICAL BASIS OF01045011
               DEVELOPMENT.  DRAWING FROM THE PREVIOUS MODULE, THE         01045012
               INSTRUCTOR SHOULD BEGIN BY DEVELOPING THE DARWINIAN NOTION01045013
               OF ORIGIN AND SURVIVAL OF SPECIES LEADING FROM LOWER        01045014
```

```
*OBJECTIVES    CONTINUED DEVELOPMENT OF A KNOWLEDGE BASE, CONCEPTUAL SET,01046025
               AND ATTITUDINAL FOUNDATION FOR DEVELOPMENT AS THE           01046026
               DEVELOPMENT OF MORE COMPLEX FORMS THROUGH THE INTERACTION 01046027
               OF ORGANISMS AND ENVIRONMENT.  SPECIFIC OREINTATION TO      01046028
               NON-FIXED INTELLIGENCE AND CONDITIONS WITHIN EDUCATIONAL  01046029
               ENVIRONMENT THAT ACT IN OPPOSITION TO DEVELOPMENT.          01046030
*PREREQUISITE  PREVIOUS MODULES ON DEVELOPMENT AND ASSIGNED READINGS.      01046031
*EXPERIENCE    CONTENT LECTURE ON THE INTERACTION BETWEEN INTELLIGENCE     01046011
               AND EXPERIENCE.  BASED UPON THE PREVIOUS MODULE THE         01046012
               INSTRUCTOR SHOULD NOW SET THE CENTRAL DEVELOPMENTAL THEME 01046013
               OF THE INTERACTION OF ORGANISM AND ENVIRONMENT.  DRAWING  01046014
               FROM MCVICKER HUNTS TREATMENT OF INTELLIGENCE AND           01046015
               EXPERIENCE THE INSTRUCTOR SHOULD INTRODUCE THE ARGUMENT    01046016
               AGAINST FIXED INTELLIGENCE AND FIXED DEVELOPMENT           01046017
               EMPHASIZING NOT THE EVIDENCE ITSELF BUT RATHER ITS         01046018
               CONTRIBUTION TO PRESENT THEORY OF DEVELOPMENT.  THIS       01046019
               SHOULD BE FOLLOWED BY A DISCUSSION OF HOW THESE            01046020
               ASSUMPTIONS OF NON-FIXED ABILITIES ARE SO OFTEN VIOLATED   01046021
               IN THE SCHOOLS AND OTHER AREAS OF SOCIETY.  THIS SHOULD    01046022
               LEAD TO A PRE-ORGANIZER DISCUSSION OF HOLTS WHY CHILDREN   01046023
               FAIL.                                                      01046024
*SETTING       LARGE GROUP  COLLEGE                                       01046 10
*MATERIALS     ASSIGNED READING -- HOLTS WHY CHILDREN FAIL.               01046  5
*LEVEL         ALL GRADES                                                 01046  8
*GENERAL       ALL CANDIDATES                                             01046  7
*HOURS         1                                                          01046  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION OVER CONTENT INCLUDING BOTH    01046032
               MASTERY AND DISCRIMINATION ITEMS, LATER EVALUATION OF      01046033
               ATTITUDE AND ORIENTATION TO THE EDUCATIONAL SETTING.       01046034
*FILE          DEVELOPMENT  INTELLIGENCE  ORGANISM AND ENVIRNOMENT        01046  9
```

```
*OBJECTIVES    TO INTRODUCE THE FORMAL COMPONENTS OF INTELLIGENCE--       01047029
               FUNCTIONS, CONTENT AND STRUCTURES--IN BOTH CONCEPTUAL AND  01047030
               AND PRINCIPLE FORM AND TO ORIENT THE STUDENTS TO THE       01047031
               PIAGETIAN DEVELOPMENTAL SYSTEM AND MODEL.                  01047032
*PREREQUISITE  PREVIOUS MODULES ON DEVELOPMENT                            01047033
*EXPERIENCE    DISCUSSION OF FUNCTION, STRUCTURE AND CONTENT OF COGNITION01047011
               AND INTELLIGENCE, AND THEIR INTERACTION AS DEVELOPMENT OF  01047012
               OF MORE COMPLEX FORMS.  THE INSTRUCTOR SHOULD BEGIN BY     01047013
               BRIEFLY OUTLINING WHERE THE PREVIOUS MODULES IN THE        01047014
               DEVELOPMENT AREAS HAVE MOVED TO, FOCUSING ON THE BASIC     01047015
               ASSUMPTIONS, CONCEPTS AND THEIR INTERRELATIONSHIP.  HE     01047016
               SHOULD THEN SHOW THE STUDENTS A BRIEF FILM STRIP SHOWING   01047017
               A CHILD IN AN EXPERIMENTAL LEARNING SETTING INVOLVED IN A  01047018
               COMPLEX TAST SUCH AS THE FILM OF THE CHILD PERFORMING THE  01047019
               KENDLER EXPERIMENT OR ONE OF THE CHILD PERFORMING THE      01047020
               CLASSIC PIAGET EXPERIMENT INVOLVING THE CONSERVATION OF    01047021
               MASS.  AFTER THE STRIP THE INSTRUCTOR SHOULD DIRECT        01047022
               DISCUSSION TO WHAT THE STUDENTS SAW IN THE STRIP AND WITH  01047023
               THEIR EXAMPLES BEGIN TO DRAW OUT THE DISTINCTIONS BETWEEN  01047024
               STRUCTURE, CONTENT, AND FUNCTIONS OF INTELLIGENCE.  THIS   01047025
               WOULD BE FOLLOWED BY THE INSTRUCTOR PROVIDING SOME FORMAL  01047026
               DEFINITIONS AND EXAMPLES OF THE PARTS OF INTELLIGENCE AND  01047027
               THEN ASKING THE STUDENTS TO PROVIDE OTHER EXAMPLES.        01047028
*SETTING       LARGE GROUP  SMALL GROUP 1-12 STUDENTS  COLLEGE            01047 10
*MATERIALS     FILM STRIP 10 MINUTES OF CHILD INVOLVED IN A COMPLEX       01047  5
               EXPERIMENTAL TASK.
*LEVEL         ALL GRADES                                                 01047  8
*GENERAL       ALL CANDIDATES                                             01047  7
*HOURS         1                                                          01047  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION INCLUDING ONLY MASTERY ITEMS,  01047034
               CONTINUED EVALUATION OF STUDENT PARTICIPATION IN           01047035
               DISCUSSION.                                                01047036
*FILE          DEVELOPMENT  COGNITION  PIAGET                             01047  9
```

```
*OBJECTIVES    TO PROVIDE THE FUNDAMENTAL CONTENT PERTAINING TO PIAGETS   01048028
               THEORY AND SYSTEM OF DEVELOPEMNT WITHIN THE MODULE         01048029
               STRUCTURE BEING DEVELOPED WITH PRIMARY FOCUS ON THE IDEA   01048030
               OF STRUCTURES OF INTELLIGENCE.                             01048031
*PREREQUISITE  PREVIOUS MODULES ON DEVELOPMENT                            01048032
*EXPERIENCE    CONTENT LECTURE ON PIAGETIAN DEVELOPMENTAL SYSTEM.  BASED  01048011
```

```
               DISCUSSION FROM PREVIOUS MODULE, THE INSTRUCTOR SHOULD      01048012
               FORMALLY INTRODUCE THE PIAGETIAN THEORY OF DEVELOPMENT.     01048013
               CONTENT TO BE COVERED SHOULD INCLUDE PIAGETS THEORY OF      01048014
               INTELLIGENCE, OF DEVELOPMENT, AND OF THE QUALITATIVE        01048015
               STAGES ATTEND TO THE REALITY OF STAGES, INVARIANT SEQUENCE01048016
               OF THE STAGES, HIERARCHIAL RELATIONSHIP BETWEEN SUCCESSIVE01048017
               STAGES, THE INTEGRATED CHARACTER OF STAGES, PREPARATION     01048018
               AND ACHIEVEMENT PERIODS AND THE IDEA OF HORIZONTAL AND      01048019
               VERTICAL DECALAGES.  PAY PARTICULAR ATTENTION TO THE        01048020
               PIAGETIAN THESIS THAT THE ROLE OF PSYCHOLOGY SHOULD BE      01048021
               AIMED AT DISCOVERY OF THE VARIABLES THAT CONTROL BEHAVIOR 01048022
               OF WHICH THE CENTRAL PROBLEM IS LEARNING--THE CONDITIONS   01048023
               THAT FACILITATE IT AND SLOW IT DOWN.  FINISH WITH THE      01048024
               FOCUS ON THE STRUCTURAL COMPONENTS OF INTELLIGENCE.        01048025
               STUDENTS SHOULD HAVE READ BY NOW THE ASSIGNED READING ON   01048026
               PIAGET IN ROGER BROWNS SOCIAL PSYCHOLOGY,                  01048027
*SETTING       LARGE GROUP  COLLEGE                                       01048 10
*MATERIALS     ASSIGNED READINGS CHAPTERS 5 AND 6 IN ROGER BROWNS SOCIAL 01048  5
               PSYCHOLOGY.
*LEVEL         ALL GRADES                                                 01048  8
*GENERAL       ALL CANDIDATES                                             01048  7
*HOURS         1                                                          01048  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION INCLUDING ONLY MASTERY ITEMS. 01048033
*FILE          DEVELOPMENT  PIAGET  INTELLIGENCE                          01048  9
```

```
*OBJECTIVES    TO INTRODUCE AND APPLY IN EXEMPLAR FORM THE NATURE OF THE 01049036
               ASSIMILATIVE-ACCOMODATIVE PROCESS OF DEVELOPMENT AND THE  01049037
               CHANGING STRUCTURES SCHEMA WHICH DEVELOP FROM THIS        01049038
               PROCESS.                                                  01049034
*PREREQUISITE  PREVIOUS MODULES ON DEVELOPMENT                           01049035
*EXPERIENCE    DISCUSSION OF COGNITIVE ADAPTATION.  THE BASIC CONTENT TO 01049011
               BE COVERED IN THIS DISCUSSION SHOULD INCLUDE ASSIMILATION-01049012
               ACCOMODATION AS THE PROCESS OF COGNITIVE ADAPTATION AND   01049013
               THE DEVELOPMENT OF SCHEMA AS THE STRUCTURAL CHANGE THAT   01049014
               TAKES PLACE AS THE RESULT OF THE ASSIMILATION-            01049015
               ACCOMODATION.  THE INSTRUCTOR SHOULD BEGIN BY DESCRIBING  01049016
               THE SIMPLE EXAMPLE OF THE INFANT COMING IN CONTACT WITH A 01049017
               RING SUSPENDED FROM A STRING.  HE SHOULD THEN ASK THE     01049018
               STUDENTS TO SUGGEST IDEAS AS TO WHAT THE COGNITIVE        01049019
               PROCESSES OF THE CHILD MIGHT BE AND AS SUGGESTIONS ARE    01049020
               MADE HE BEGINS TO CATEGORIZE THEM IN ASSIMILATIVE OR      01049021
               ACCOMODATIVE BEHAVIORS.  AS THE MODEL OF THE CHILD PLAYING01049022
               WITH THE RING DEVELOPS HE SHOULD ASK FOR SUGGESTIONS      01049023
               THEN AS TO THE COGNITIVE STRUCTURES WHICH PROBABLY WERE   01049024
               DEVELOPING.  ASSUMING THAT THE BEST SUGGESTIONS WILL STEM 01049025
               FROM HEBBS NOTION OF CELL ASSEMBLIES, THE INSTRUCTOR      01049026
               SHOULD THEN INTRODUCE THE NOTION OF SCHEMA AND THE SCHEMAS01049027
               BEING DEVELOPED IN THE SPECIFIC EXAMPLE.  FROM THERE HE   01049028
               SHOULD DEVELOP IN A MORE FORMAL FASHION THE BASIC         01049029
               PROPERTIES OF ASSIMILATION-ACCOMODATION, AND THE OPERATION01049030
               AND DEVELOPMENT OF SCHEMA.  EMPHASIS SHOULD BE PLACED UPON01049031
               THE FACT THAT THESE NOTIONS WERE NOT A SUBSTITUTE FOR     01049032
               BEHAVIORS, BUT WERE INTERVENING VARIABLES WHICH WERE      01049033
               SUGGESTED BY BEHAVIORS AND SEEMED TO MAKE THE WHOLE SYSTEM01049034
               HANG TOGETHER SIMILAR TO HEBBS IDEA OF CELL ASSEMBLY.     01049035
*SETTING       LARGE GROUP  SMALL GROUP 1-12 STUDENTS  COLLEGE            01049 10
*MATERIALS     BLANK                                                     01049  5
*LEVEL         ALL GRADES                                                01049  8
*GENERAL       ALL CANDIDATES                                            01049  7
*HOURS         1                                                         01049  6
```

```
*EVALUATION    CONTENT EVALUATION BY MULTIPLE-CHOICE EXAMINATION FOCUSING01049036
               ESPECIALLY ON MASTERY ITEMS, LATER EVALUATION OF THE      01049037
               BEHAVIORALLY APPROPRIATE USE OF THESE CONCEPTS, AND LATER 01049038
               EVALUATION OF ATTITUDINAL OR FRAME OF REFERENCE IN        01049039
               CONSIDERING DEVELOPMENTAL PROBLEMS.                       01049040
*FILE          DEVELOPMENT  COGNITION ADAPTATION  ASSIMILATIVE PROCESS   01049  9

*OBJECTIVES    TO PROVIDE BEHAVIORAL EXAMPLES AND AN ORDERING OF THESE   01050028
               EXAMPLES IN EARLY CHILDHOOD DEVELOPMENT TO MORE FIRMLY    01050029
               ESTABLISH THE CONCEPTS OF STRUCTURAL DEVELOPMENTAL STAGES 01050030
               AND THE ROLE OF EVIRONMENTAL INTERVENTION IN CONTROLING   01050031
               THE RATE OF STRUCTURAL CHANGE.                            01050032
*PREREQUISITE PREVIOUS MODULES IN DEVELOPMENT                            01050033
*EXPERIENCE    DISCUSSION OF THE EARLY PIAGETIAN STAGES.  INSTRUCTOR     01050011
               SHOULD BEGIN BY ASKING STUDENTS TO ATTEMPT TO TIE TOGETHER01050012
               HEBBS IDEAS WITH HUNTS EVIDENCE ON NONFIXED INTELLIGENCE  01050013
               AND DEVELOPMENT.  THIS SHOULD LEAD TO SPECIFIC EXAMPLES OF01050014
               THE PRESENCE OR ABSENCE OF CERTAIN SPECIFIC ENVIRONMENTAL 01050015
               STIMULUS CONDITIONS WHICH SEEM TO PRODUCE SPECIFIC        01050016
               BEHAVIORS.  THE INSTRUCTOR SHOULD DIRECT THE DISCUSSION   01050017
               INTO PROVIDING A SEQUENTIAL ORDERING OF THESE EXAMPLES IN 01050018
               TIME AND THEN TYING THIS ORDERING BACK TO THE PIAGETIAN   01050019
               SENSORI-MOTOR AND PREOPERATIONAL PHASES.  ALL DISCUSSION  01050020
               SHOULD REVOLVE WITHIN THE FRAMEWORK SUGGESTED BY THE IDEAS01050021
               THAT 1 THE STAGING OF INCREASINGLY COMPLEX COGNITIVE      01050022
               STRUCTURES IS INVARIANT, BUT THAT 2 THE NATURE AND DEGREE 01050023
               OF ENVIRONMENTAL INTERVENTION LARGELY DETERMINES RATE OF  01050024
               CHANGE.  IT MAY BE APPROPRIATE AT THE END OF THE          01050025
               DISCUSSION TO BRING IN BLOOMS NEGATIVELY ACCELORATING     01050026
               CURVE OF COGNITIVE GROWTH MODEL.                          01050027
*SETTING       LARGE GROUP  SMALL GROUP 1-12 STUDENTS  COLLEGE           01050 10
*MATERIALS     BLANK                                                     01050  5
*LEVEL         ALL GRADES                                                01050  8
*GENERAL       ALL CANDIDATES                                            01050  7
*HOURS         1                                                         01050  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION AND LATER EVALUATION OF       01050034
               STUDENTS CULTURALROUNDEDNESS IN PERCEIVING CHILDRENS      01050035
               EDUCATIONAL NEEDS.                                        01050036
*FILE          DEVELOPMENT  ENVIRONMENT  STRUCTURAL CHANGE               01050  9

*OBJECTIVES    TO FURTHER DISTINGUISH THE STRUCTURE OF COGNITION IN      01051038
               DEVELOPMENTAL TERMS AND TO SHOW THE LEVEL OF ABSTRACTION  01051039
               AND THE DEGREE OF TRANSFER AS THE PRODUCTS OF THIS CHANGE 01051040
               AT ANY POINT IN TIME.                                     01051041
*PREREQUISITE PREVIOUS MODULES ON DEVELOPMENT                            01051042
*EXPERIENCE    DISCUSSION OF THE BREADTH OF TRANSFER AND LEVEL OF        01051011
               ABSTRACTION AS THE PRODUCT COGNITIVE STRUCTURAL           01051012
               DEVELOPMENT.  INSTRUCTOR BEGINS BY DRAWING ON THE EXAMPLE 01051013
               OF THE CHILD IN THE PRE-OPERATIONAL STAGE WHO, AS IN THE  01051014
               CONSERVATION OF MASS EXPERIMENTAL SITUATION, THINKS       01051015
               TRANSDUCTIVELY FROM STIMULUS OBJECT TO STIMULUS OBJECT.   01051016
               HE THEN ASKS THE STUDENTS TO DESCRIBE WHAT THE            01051017
               CHARACTERISTICS OF THIS CHILDS THOUGHT STRUCTURES ARE     01051018
               BEING CAREFUL NOT TO LET CONFUSION DEVELOP BETWEEN PROCESS01051019
               AND STRUCTURE.  AS THE STUDENTS BEGIN TO GRASP THESE      01051020
               DISTINCTIONS, HE THEN ASKS WHAT SORTS OF STRUCTURAL       01051021
               CHANGES WOULD BE EXPECTED NEXT LEADING TO SIMPLE CONCEPT  01051022
               AND PRINCIPLE FORMATION WITHIN STIMULUS CLASS.  AFTER     01051023
               DEVELOPING THE NOTION OF SIMPLE SYMBOLIC ABSTRACTION      01051024
```

```
              WITHIN STIMULUS CLASS OR SET, HE ASKS FOR EXAMPLES THAT   01051025
              ARE FURTHER REMOVED FROM ORIGINAL STIMULUS.  WITHIN THIS  01051026
              DISCUSSION HE INTRODUCES THE IDEA OF STIMULU-BOUNDEDNESS  01051027
              AS AN EQUIVALENT MEANING FOR LEVEL OF ABSTRACTION IN ORDER01051028
              TO RELATE TO ORIGINAL PERCEPTUAL INPUT.  AT THIS POINT HE 01051029
              SHOULD ASK THE STUDENTS TO TELL THEN WHY THE              01051030
              PRE-OPERATIONAL CHILD WILL GIVE THE WRONG ANSWER IN THE   01051031
              CONSERVATION OF MASS EXPERIMENT IF THEY JUST VIEW THE     01051032
              POURING OF LIQUID FROM ONE CONTAINER TO ANOTHER, BUT WILL 01051033
              GIVE THE RIGHT ANSWER IF THEY THEMSELVES DO THE POURING.  01051034
              DISCUSSION SHOULD END WITH THE STUDENTS DISTINGUISHING    01051035
              BETWEEN LEVEL OF ABSTRACTION AND DEGREE OF TRANSFER       01051036
              HORIZONTAL AND VERTICAL DECALAGES.                        01051037
*SETTING      SMALL GROUP 1-12 STUDENTS  COLLEGE                        01051 10
*MATERIALS    BLANK                                                     01051  5
*LEVEL        ALL GRADES                                                01051  8
*GENERAL      ALL CANDIDATES                                            01051  7
*HOURS        1                                                         01051  6
*EVALUATION   EXAMINATION IN WHICH THE STUDENTS HAVE TO DISTINGUISH     01051043
              BETWEEN TASKS AS TO THE LEVEL OF COGNITIVE STRUCTURE      01051044
              INVOLVED, RELATIONSHIP TO ORIGINAL PERCEPTION, AND DEGREE 01051045
              OF TRANSFER POSSIBLE.                                     01051046
*FILE         DEVELOPMENT  TRANSFER  ABSTRACTION                        01051  9
```

```
*OBJECTIVES   TO CLARIFY CONTENT CONCERNED WITH PIAGETIAN CONCRETE AND  01052028
              FORMAL OPERATIONS STAGES AND TO ATTEMPT TO TRANSFER THESE 01052029
              PRINCIPLES INTO THE EDUCATIONAL SETTING.                  01052030
*PREREQUISITE PREVIOUS MODULES ON DEVELOPMENT, ROGER BROWNS CHAPTER 5 IN01052031
              SOCIAL PSYCHOLOGY.                                        01052032
              DISCUSSION OF PIAGETS CONCRETE AND FORMAL OPERATION       01052011
              STAGES.  BASED UPON THE READINGS FROM ROGER BROWNS SOCIAL 01052012
              PSYCHOLOGY AND THE PREVIOUS DISCUSSION, THE INSTRUCTOR    01052013
              SHOULD BEGIN BY ASKING THE STUDENTS TO DISCUSS FIRST THE  01052014
              NATURE OF PIAGETS STAGES AND THEN TO SUGGEST HOW          01052015
              CONDITIONS WITHIN AN INDIVIDUALS ENVIRONMENT COULD ENHANCE01052016
              OR DETRACT FROM PASSAGE THROUGH THESE STAGES.  THE        01052017
              DISCUSSION SHOULD ATTEMPT TO FOCUS ON SPECIFIC STIMULUS   01052018
              SITUATIONS AND ENVIRONMENTAL EXPECTATIONS WHICH DEMAND    01052019
              THAT THE INDIVIDUAL DEAL WITH THESE TYPES OF TASKS.  THE  01052020
              INSTRUCTOR SHOULD BE WARY TO CONFUSION BETWEEN VERTICAL   01052021
              AND HORIZONTAL DECALAGE.  ONCE THE INSTRUCTOR IS SURE THAT01052022
              THE PROPER DISCRIMINATIONS HAVE BEEN MADE, HE SHOULD      01052023
              RETURN TO THE DISCUSSION OF HOLTS WHY CHILDREN FAIL.  FOR 01052024
              THE REMAINDER OF THE DISCUSSION HE SHOULD GUIDE THE       01052025
              DISCUSSION AROUND VARIOUS SUPPOSITIONS WITHIN THAT CONTEXT01052026
              WHICH SUGGEST LACK OF ATTENTION TO DEVELOPMENT.           01052027
*SETTING      SMALL GROUP 1-12 STUDENTS  COLLEGE                        01052 10
*MATERIALS    BLANK                                                     01052  5
*LEVEL        ALL GRADES                                                01052  8
*GENERAL      ALL CANDIDATES                                            01052  7
*HOURS        1                                                         01052  6
*EVALUATION   LEVEL AND QUALITY OF DISCUSSION, LATER EVALUATION OF      01052033
              APPLICATION.                                              01052035
```

```
*OBJECTIVES   TO PROVIDE THE STUDENT WITH APPLICATION EXPERIENCE WITHIN 01053021
              AN EDUCATIONAL SETTING IN ANALYZING AND SYNTHESIZING A    01053022
              PARTICULAR SET OF BEHAVIORS FROM THE STANDPOINT OF        01053023
              DEVELOPMENT.                                              01053024
*PREREQUISITE PREVIOUS MODULES ON DEVELOPMENT                           01053025
```

```
*EXPERIENCE    STUDENT PAPER, FOR THIS PAPER, THE STUDENTS WILL TAKE ONE01053011
               DESCRIPTIVE EXAMPLE FROM HOLTS WHY CHILDREN FAIL AND      01053012
               PERFORM ESSENTIALLY THREE OPERATIONS ON THIS INPUT.  FIRST01053013
               THEY ARE TO DISCUSS IN PIAGETIAN-DEVELOPMENTAL TERMS WHAT 01053014
               THE PROBABLE CAUSES OF FAILURE ARE, SPECIFICALLY          01053015
               INDICATING ENVIRONMENTAL FAILURES OR MIS-EMPHASES.  SECOND01053016
               THEY ARE TO SUGGEST WHAT THE APPROPRIATE COURSE OF        01053017
               DEVELOPMENT SHOULD HAVE BEEN.  THIRD THEY ARE TO SUGGEST  01053018
               HOW THEY WOULD ATTEMPT TO DEAL WITH THIS SITUATION NOW AS 01053019
               DESCRIBED.                                                01053020
*SETTING       INDEPENDENT  COLLEGE                                      01053 10
*MATERIALS     BLANK                                                     01053  5
*LEVEL         ALL GRADES                                                01053  8
*GENERAL       ALL CANDIDATES                                            01053  7
*HOURS         5-10                                                      01053  6
*EVALUATION    THE PAPERS SHOULD BE JUDGED UPON THE CRITERION OF RANGE OF01053026
               DISCUSSION, INTERNAL CONSISTENCY BETWEEN ANALYSIS,        01053027
               SYNTHESIS AND SUGGESTIONS, AND CORRECTNESS OF CONCEPTS    01053028
               USED.                                                     01053029
*FILE          DEVELOPMENT  PIAGET  ENVIRNOMENT                          01053  9

*OBJECTIVES    TO PROVIDE OPPORTUNITY FOR THE STUDENTS TO TRANSFER THE   01054028
               CONCEPTS AND PRINCIPLES OF DEVELOPMENT INTO THE LESS      01054029
               EMPIRICALLY RESEARCHED, BUT EDUCATIONALLY RELEVANT SOCIAL 01054030
               CONTEXTS, TO PROVIDE FURTHER EXPERIENCE IN APPLYING AND   01054031
               MANIPULATING THE IDEA OF DEVELOPMENT AS THE DEVELOPMENT OF01054032
               MORE COMPLEX FORMS.                                       01054033
*PREREQUISITE  PREVIOUS MODULES ON DEVELOPMENT                           01054034
*EXPERIENCE    DISCUSSION OF THE AREAS IN WHICH THERE IS EVIDENCE OF THE 01054011
               CORRECTNESS OF THE PIAGETIAN SYSTEM AND DISCUSSION OF     01054012
               AREAS WHICH ARE PLAUSIBLE BUT NOT NECESSARILY SUPPORTED BY01054013
               RESEARCH.  IN THIS DISCUSSION THE INSTRUCTOR SHOULD       01054014
               CONTINUE TO STRUCTURE DISCUSSION SO THAT STUDENTS WOULD   01054015
               DRAW PARALLELS WITHIN THE DEVELOPMENTAL PERSPECTIVE MOVING01054016
               FURTHER FROM SUCH STRICTLY CONTENT-BOUND AREAS AS MATH,   01054017
               PHYSICS, LOGIC, ETC.  BEGINNING WITH THE NATURE OF FORMAL 01054018
               OPERATIONS AND THE SOLUTION OF SOCIAL PROBLEMS, THE       01054019
               INSTRUCTOR SHOULD DIRECT DISCUSSION IN TO THE CHILDS      01054020
               SOCIALIZATION DEVELOPMENT AND THE CULTURAL CONCOMMITANTS  01054021
               OF DEVELOPMENT AND THE PROBLEMS INVOLVED IN MORAL         01054022
               CONCEPTIONS.  AT SOME POINT IN THE DISCUSSION, THE PROBLEM01054023
               OF PAROCIALISM AND PAROCIAL SOLUTIONS TO COMPLEX PROBLEMS,01054024
               SHOULD BE CONSIDERED FROM THE DEVELOPMENTAL STANDPOINT    01054025
               ESPECIALLY IN REGARD TO THE ENVIRONMENTAL CONDITIONS      01054026
               WITHIN WHICH THE CHILD MIGHT DEVELOP.                     01054027
*SETTING       SMALL GROUP 1-12 STUDENTS  COLLEGE                        01054 10
*MATERIALS     BLANK                                                     01054  5
*LEVEL         ALL GRADES                                                01054  8
*GENERAL       ALL CANDIDATES                                            01054  7
*HOURS         1-2                                                       01054  6
*EVALUATION    QUALITY AND LEVEL OF DISCUSSION, ABILITY TO APPLY CONCEPTS01054035
               AND PRINCIPLES, AND CONTINUED ATTITUDINAL CHANGE TOWARD   01054036
               THE EDUCATIONAL SETTING.                                  01054037
*FILE          DEVELOPMENT  FORMAL OPERATIONS  SOCIAL PROBLEMS           01054  9

*OBJECTIVES    SERVES AS A BRIDGE FROM DISCUSSION OF THOUGHT PROCESS AS  01055028
               INCREASINGLY COMPLEX FORMS, TO A DISCUSSION OF THE        01055029
               PERSONALITY DEVELOPING IN INCREASINGLY COMPLEX FORM.      01055030
*PREREQUISITE  AN UNDERSTANDING OF PIAGETIAN ASSUMPTIONS OF INCREASING   01055031
```

```
               COMPLEX THOUGHT.  A THOROUGH UNDERSTANDING OF WHAT IS      01055032
               REALLY MEANT BY REVERSIBILITY AND IRREVERSIBILITY IN       01055033
               DEVELOPMENT.                                               01055034
*EXPERIENCE    CONTINUATION OF MODEL OF THE LEARNER AS DEVELOPING IN      01055011
               TERMS OF AN INCREASINGLY COMPLEX MODEL.  DEVELOPS FROM     01055012
               PIAGETIAN MODEL OF LEARNER DEVELOPING INCREASINGLY COMPLEX01055013
               PATTERNS OF THOUGHT.  HAVE STUDENTS REFLECT ON FRESHMEN    01055014
               THEY, AS OLDER STUDENTS HAVE ENCOUNTERED, DURING FALL      01055015
               TERMS AT MICHIGAN STATE.  ASK STUDENTS, IN SMALL GROUPS,   01055016
               TO DEVELOP A LIST OF TASKS THAT FRESHMEN GIRLS OR BOYS     01055017
               MUST MASTER IN THEIR OWN EYES, AND THOSE THAT OLDER        01055018
               STUDENTS IN THE DORM EXPECT WILL BE MASTERED.  WHEN GROUPS01055019
               REUNITE FOR COMPARISON OF IDEAS, DISCUSSION SHOULD LEAD TO01055020
               REALIZATION OF THE COMPLEX PATTERNS FRESHMEN MUST MASTER   01055021
               IN ADJUSTING TO COLLEGE LIFE, AND THE POSSIBLE RESULTS IF  01055022
               THEY DO NOT.  STUDENTS SHOULD COME TO SEE THAT SOCIETY     01055023
               DECREES A COMPLEX ORGANIZATION OF PROBLEMS THAT ALL        01055024
               INDIVIDUALS ENCOUNTER IN SOME FORM AT CERTAIN STAGES IN    01055025
               THEIR LIVES, AND THAT UNLESS THESE ARE RESOLVED, LATER     01055026
               DIFFICULTY IS ENCOUNTERED.                                 01055027
*SETTING       LARGE GROUP  COLLEGE                                       01055 10
*MATERIALS     READINGS IN SOCIAL DEVELOPMENT, SUCH AS HAVIGHURSTS        01055  5
               DEVELOPMENTAL TASK CONCEPT
*LEVEL         ALL GRADES                                                 01055  8
*GENERAL       ALL CANDIDATES                                             01055  7
*HOURS         1                                                          01055  6
*EVALUATION    A SHORT PAPER DISCUSSING ITS APPLICATION IN THE CLASSROOM  01055035
               IN BEHAVIORAL TERMS, BUT EVALUATION WOULD BE MORE          01055036
               PROFITABLY COUPLED WITH FOLLOWING MODULES ON PERSONALITY    01055037
               DEVELOPMENT.                                               01055038
*FILE          DEVELOPMENT  TASKS  PIAGET                                 01055  9
```

```
*OBJECTIVES    A FURTHER DISCUSSION OF COMPLEXITY OF DEVELOPMENT, WITH    01056025
               EMPHASIS ON DEVELOPMENT AS ORGANIZED IN A MANNER SOCIETY   01056026
               DEEMS IMPORTANT                                            01056027
*PREREQUISITE UNDERSTANDING OF PIAGETIAN MODEL OF INCREASINGLY COMPLEX    01056028
               COGNITIVE MODEL UNDERSTANDING OF THE COMPLEX ORGANIZATION  01056029
               OF PROBLEMS THAT ALL INDIVIDUALS ENCOUNTER AS DECREED BY   01056030
               SOCIETY, AND AS REFLECTED IN DEVELOPMENTAL TASKS           01056031
*EXPERIENCE    OPENING DISCUSSION OF WHAT IS MEANT BY THE GREEK CONCEPT   01056011
               OF THE FULL LIFE.  NOTION OF IMPORTANCE OF CONTRIBUTION TO01056012
               THE INDIVIDUALS CULTURE.  STUDENTS CONSTRUCT MODEL OF THE  01056013
               INDIVIDUAL IN TERMS OF WHAT OUR CULTURE EXPECTS AN ADULT   01056014
               TO THEORETICALLY BE PREPARED TO CONTRIBUTE TO HIS SOCIETY.01056015
               ASK STUDENTS TO IDENTIFY PRECURSORS TO THE END-BEHAVIOR    01056016
               THEY CONSIDER ADULTS SHOULD MANIFEST.  UTILIZATION OF      01056017
               CULTURAL IMPLICATIONS OF ERIK ERIKSONS STAGES AS           01056018
               ILLUSTRATIVE OF HOW PRECOURSERS ARE IMPORTANT TO THE END-  01056019
               PRODUCT DESIRED.  FOR EXAMPLE, THE TRUST-MISTRUST CONFLICT01056020
               WITH CULTURAL IMPLICATIONS OF COMMITMENT AS SEEN AGAIN IN  01056021
               THE STAGE OF MATURITY WITH CULTURAL IMPLICATIONS OF        01056022
               COMMITMENT TO SOCIETY.  CONCENTRATION ON PRESCHOOL         01056023
               IMPLICATIONS.                                              01056024
*SETTING       LARGE GROUP  COLLEGE                                       01056 10
*MATERIALS     BACKGROUND READINGS IN ERIK ERIKSONS STAGES                01056  5
*LEVEL         ALL GRADES                                                 01056  8
*GENERAL       ALL CANDIDATES                                             01056  7
*HOURS         1                                                          01056  6
*EVALUATION    SEE FOLLOWING MODULE                                       01056032
*FILE          DEVELOPMENT  FULL LIFE  ADULT BEHAVIOR                     01056  9
```

```
*OBJECTIVES    TO HELP STUDENTS EXPRESS IN BEHAVIORAL TERMS JUST WHAT      01057023
               SOCIETY DEMANDS OF THE SCHOOLS IN TERMS OF DEVELOPING A     01057024
               USEFUL END-PRODUCT, AND THE IMPORTANCE OF PRECURSERS.       01057025
               CONTINUED EMPHASIS ON IDEA OF A MODEL OF THE LEARNER IN     01057026
               TERMS OF INCREASING COMPLEXITY                              01057027
*PREREQUISITE PREVIOUS MODELS ON PIAGET, HAVIGHURSTS DEVELOPMENTAL         01057028
               TASKS, AND ERIK ERIKSON                                     01057029
*EXPERIENCE    STUDENTS ARE ASKED TO IDENTIFY THE ROLE OF THE SCHOOLS IN   01057011
               DEVELOPING THE END-PRODUCT DESIRED BY SOCIETY IN TERMS OF   01057012
               AN INDIVIDUAL WHO BENEFITS HIS SOCIETY.  FOR EARLY ELEM.    01057013
               LATER ELEM, JR, HIGH, HIGH SCHOOL, YOUNG ADULTHOOD,         01057014
               STUDENTS ARE TO MAKE JUDGMENTS ON WHAT SOCIETY SEES AS THE01057015
               IMPORTANT END-PRODUCT OF EACH PERIOD.  STUDENTS ARE GUIDED01057016
               BY YESTERDAYS MODEL, IN TERMS OF THE CULTURAL IMPLICATIONS01057017
               OF PRESCHOOL DEVELOPMENT AS IMPORTANT FORERUNNERS OF THE    01057018
               END-PRODUCT AT MATURITY.  ERIKSONS DISCUSSION IS UTILIZED   01057019
               AS A GUIDE.  EMPHASIS ON SCHOOLS AS TRANSMITTERS OF THOSE   01057020
               FACTORS SOCIETY JUDGES TO BE CRITICAL IN TERMS OF ITS       01057021
               PERPETUATION AND DEVELOPMENT.                               01057022
*SETTING       LARGE GROUP  COLLEGE                                        01057 10
*MATERIALS     CONTINUED READINGS IN SOCIAL DEVELOPMENT                    01057  5
*LEVEL         ALL GRADES                                                  01057  8
*GENERAL       ALL CANDIDATES                                              01057  7
*HOURS         1                                                           01057  6
*EVALUATION    SEE MODULE AT END OF DEVELOPMENT SERIES ON SOCIAL LEARNING01057030
*FILE          DEVELOPMENT  SCHOOLS  ERIKSONS MODEL                        01057  9
```

```
*OBJECTIVES    CONTINUATION OF NOTION OF CULTURAL IMPLICATIONS OF          01058023
               DEVELOPMENT,  ILLUSTRATION OF COMPLEXITY OF INTERACTION     01058024
               BETWEEN INDIVIDUALS NEEDS AND SOCIETYS DEMANDS.             01058025
*PREREQUISITE PREVIOUS MODELS ON COMPLEX MODELS INCLUDING PIAGET,          01058026
               HAVIGHURST, ERIKSON                                         01058027
*EXPERIENCE    STUDENTS REPLY TO A SERIES OF OPEN-ENDED QUESTIONS ON THE   01058011
               USE OF LSD, IN THE FORM OF SENTENCE COMPLETION.  SENTENCES01058012
               PERMIT COMMENT UPON HOW THEYD FEEL UNDER ITS INFLUENCE,     01058013
               WHY IT IS TAKEN, WHY SOCIETY BY AND LARGE HAS PUT A TABOO   01058014
               UPON ITS USE, ETC.  DISCUSSION OF WHETHER OR NOT ONE        01058015
               EXPERIENCES THE SAME SENSATIONS WITHOUT THE USE OF THE      01058016
               DRUG.  REVIEW OF ERIKSONS MODEL OF THE MATURE INDIVIDUAL    01058017
               LEADS TO DISCUSSION OF MASLOWS SELF ACTUALIZERS, AND HOW    01058018
               SUCH INDIVIDUALS DEVELOP IN SOCIETY, THE TYPE OF            01058019
               ATMOSPHERE THAT PERMITS PEAK EXPERIENCES TO OCCUR, THE      01058020
               IMPORTANCE OF SUCH ATMOSPHERE FROM EARLY SCHOOL YEARS,      01058021
               RATHER THAN CONSTRICTION.                                   01058022
*SETTING       LARGE GROUP  COLLEGE                                        01058 10
*MATERIALS     READINGS IN MASLOWS CONCEPTS OF SELF-ACTUALIZING            01058  5
*LEVEL         ALL GRADES                                                  01058  8
*GENERAL       ALL CANDIDATES                                              01058  7
*HOURS         1                                                           01058  6
*EVALUATION    SEE MODULE AT END OF DEVELOPMENT SERIES ON SOCIAL LEARNING01058028
*FILE          DEVELOPMENT  SELF-ACTUALIZATION  LSD                        01058  9
```

```
*OBJECTIVES    AN ATTEMPT TO ANALYZE HOW IT IS THAT SOCIETY OBTAINS THE    01059022
               PRODUCT IT DESIRES IN THE ADULT, IN THEORY, AND TO          01059023
               TRANSFER THIS ANALYSIS TO DISCUSSION OF CLASSROOM           01059024
               PRODUCTS.                                                   01059025
*PREREQUISITE ENTIRE DEVELOPMENTAL SERIES DEALING WITH COGNITION AND       01059026
```

```
                SOCIAL LEARNING.                                          01059027
*EXPERIENCE     DISCUSSION OF HOW THE EVOLUTION OF MAN AND THE THINGS     01059011
                SELECTED OUT TO BE PASSED ON, IN TERMS OF BEHAVIORS, ARE  01059012
                THINGS THAT CAUSE US PROBLEMS TODAY.  EXAMPLES TAKEN FROM 01059013
                EATING BEHAVIORS, MATING, AGGRESSIVENESS, ETC. AND        01059014
                REFLECTIONS IN TERMS OF OVER-EATING, EXCESSIVE AGGRESSION,01059015
                ETC.  DISCUSSION OF REINFORCERS WHICH BECOME ENDS IN      01059016
                THEMSELVES.  STUDENTS CONCENTRATE ON IDENTIFYING          01059017
                REINFORCERS IN EARLY CHILDHOOD AND ELEMENTARY YEARS WHICH 01059018
                BECOME SELF-PERPETUATING AND DISCUSS HOW DEVIANT PATTERNS 01059019
                IN CLASS BEHAVIOR CAN BE NATURAL OUTGROWTHS OF THIS       01059020
                APPROACH.                                                 01059021
*SETTING        LARGE GROUP  COLLEGE                                      01059 10
*MATERIALS      READINGS IN THE DEVELOPMENTAL LEARNING THEORY OF ROBERT   01059  5
                SEERS, WITH EMPHASIS ON REINFORCING PROPERTIES OF
                INTERACTION WITHIN THE FAMILY
*LEVEL          ALL GRADES                                                01059  8
*GENERAL        ALL CANDIDATES                                            01059  7
*HOURS          2                                                         01059  6
*EVALUATION     A CASE STUDY OF AN ELEMENTARY SCHOOL CHILD INVOLVING      01059028
                OBSERVATION OVER TIME, AND EXPLANATION OF BEHAVIORS IN    01059029
                TERMS OF THE CHILDS INCREASINGLY COMPLEX BEHAVIOR.         01059030
                INTEGRATION OF BOTH COGNITIVE STRATEGIES AND SOCIAL       01059031
                LEARNING AS A REFLECTION OF THIS COMPLEXITY.              01059032
*FILE           DEVELOPMENT  SEERS  ADULT BEHAVIOR                        01059  9
```

```
*OBJECTIVES     DEVELOP AN EXPERIENTIAL BASE FOR CONTENT AND APPLICATION  01060028
                IN THE NATURE AND USE OF REINFORCEMENT AND CONDITIONING.  01060029
                CONTINUE THE DEVELOPMENT OF MAKING CAUSAL INFERENCES ON   01060030
                THE BASIS OF BEHAVIORAL OBSERVATIONS.                     01060031
*PREREQUISITE PREVIOUS EXPERIENCE IN PLAYING THE GAME OF ATTEMPTING TO    01060032
                TIE TOGETHER CAUSE AND EFFECT IN HUMAN BEHAVIORAL         01060033
                EXPERIENCES.                                              01060034
*EXPERIENCE     DISCUSSION OF EVENTS AND CIRCUMSTANCES ASSOCIATED WITH THE01060011
                BEGINNING OF COLLEGE.  PARTICULAR FOCUS ON BEHAVIORAL     01060012
                CHANGES OBSERVED BY THE STUDENTS IN THEMSELVES AND IN     01060013
                OTHERS WITH SPECIAL CONCENTRATION ON GETTING STUDENTS TO  01060014
                DEVELOP IDEAS AND OBSERVATIONS ABOUT CAUSALITY AND EFFECT.01060015
                INSTRUCTORS ROLE AIMED AT FOCUSING DISCUSSION ELEMENTS    01060016
                WITHIN THE DESCRIBED EXPERIENCES WHICH MIGHT HAVE ACTED AS01060017
                REINFORCERS.  SINCE THE NATURE OF THIS ACTIVITY IS        01060018
                DISCUSSION AND THE FOCUSING OF STUDENT THOUGHT UPON THE   01060019
                ROLE OF REINFORCEMENT IN THEIR OWN LIFE EXPERIENCE,       01060020
                ACTIVITY SHOULD BE BASED UPON STUDENT INITIATED EXAMPLES. 01060021
                IF THIS APPROACH DOES NOT GO THE INSTRUCTOR SHOULD BE     01060022
                PREPARED TO PRIME THE DISCUSSION WITH SEVERAL PERTINENT   01060023
                EXAMPLES INCLUDING 1 NEW STANDARDS OF BEHAVIOR ACQUIRED IN01060024
                LIVING UNITS AND SOCIAL ACTIVITIES 2 ORGANIZATION OF STUDY01060025
                AND CLASSROOM BEHAVIOR AND 3 RELATIONSHIPS WITH ACADEMIC  01060026
                PERSONNEL.                                                01060027
*SETTING        SMALL GROUP 1-12 STUDENTS  COLLEGE                        01060 10
*MATERIALS      BLANK                                                     01060  5
*LEVEL          ALL GRADES                                                01060  8
*GENERAL        ALL CANDIDATES                                            01060  7
*HOURS          1-2                                                       01060  6
*EVALUATION     1 LEVEL OF GROUP PARTICIPATION 2 QUALITY OF INSIGHTS INTO 01060035
                CAUSE AND EFFECT IN BEHAVIORAL CHANGE DUE TO REINFORCERS 301060036
                RECOGNITION OF DIFFERENT SITUATIONS IN WHICH REINFORCERS  01060037
                ARE USED AND DIFFERENCES IN TYPES OF REINFORCERS.         01060038
*FILE           REINFORCEMENT  CAUSALITY AND EFFECT  CONDITIONING         01060  9
```

```
*OBJECTIVES    PROVIDE A CONTENT BASE FOR UNDERSTANDING REINFORCERS,         01061031
               UNDER BOTH ELICITED AND EMITTED RESPONSE CONDITIONS, AND      01061032
               THE SHAPING OF BEHAVIOR, RESULT SHOULD BE STUDENT             01061033
               UNDERSTANDING OF LANGUAGE, CONCEPTS, AND PRINCIPLES OF        01061034
               REINFORCEMENT AND SHAPING OF BEHAVIOR.                        01061035
*PREREQUISITE PREVIOUS INSIGHT INTO HOW REINFORCERS HAVE BEEN A MAJOR       01061036
               FACTOR IN CHANGING THEIR OWN BEHAVIOR.                        01061037
*EXPERIENCE    CONTENT LECTURE ON REINFORCEMENT AND CONDITIONING.  FROM      01061011
               PREVIOUS MODULE, INTRODUCE TECHNICAL CONTENT PERTAINING TO01061012
               REINFORCEMENT AND CONDITIONING INCLUDING VOCABULARY,          01061013
               REINFORCEMENT, EMITTED RESPONSE-REINFORCEMENT, AND THE        01061014
               SHAPING OF BEHAVIOR.  MODE OF INSTRUCTION SHOULD BE THE       01061015
               INTRODUCTION OF TECHNICAL TERMS, CONCEPTS AND PRINCIPLES      01061016
               POINTING TO THEIR USE IN EXEMPLAR FORM FROM PREVIOUS          01061027
               DISCUSSION AND THEN PROVIDING MEANS FOR DISCRIMINATING        01061028
               AMONG THEM AGAIN BASED UPON PREVIOUS DISCUSSION.  ACTIVE      01061029
               VERBAL STUDENT PARTICIPATION IS DESIRABLE.                    01061030
*SETTING       LARGE GROUP  COLLEGE                                          01061 10
*MATERIALS     BLANK                                                         01061  5
*LEVEL         ALL GRADES                                                    01061  8
*GENERAL       ALL CANDIDATES                                                01061  7
*HOURS         1                                                             01061  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION OVER CONTENT INCLUDING BOTH       01061038
               DISCRIMINATION AND MASTERY ITEMS.                             01061039
*FILE          REINFORCEMENT  CONDITIONING  INTERACTION                      01061  9
```

```
*OBJECTIVES    BEGIN THE DEVELOPMENT OF UNDERSTANDING OF THE USE OF          01062024
               REINFORCEMENT IN THE ELEMENTARY CLASSROOM BY INTRODUCING A01062025
               BROAD NUMBER OF CIRCUMSTANCES IN WHICH THE CONCEPTS ARE       01062026
               APPLIED, BEGIN THE PROCESS OF DIFFERENTIATING BETWEEN         01062027
               NATURE AND TYPE OF REINFORCERS AND SCHEDULES OF               01062028
               REINFORCEMENT,                                                01062029
*PREREQUISITE PREVIOUS CONTENT ON REINFORCEMENT, CONDITIONING, AND          01062030
               [SHAPING[ BEHAVIOR.  PREVIOUS EXPERIENCE IN MAKING CAUSAL     01062031
               INFERENCES ABOUT HUMAN BEHAVIOR.                              01062032
*EXPERIENCE    DISCUSSION OF THE APPLICATION OF REINFORCERS IN THE           01062011
               ELEMENTARY CLASSROOM TO ACHIEVE EDUCATIONIAL OBJECTIVES.      01062012
               FROM PREVIOUS DISCUSSION AND CONTENT DEVELOP EXAMPLES OF      01062013
               HOW REINFORCEMENT CAN BE APPLIED IN THE CLASSROOM USING       01062014
               EXAMPLES PROVIDED BY THE STUDENTS.  DISCUSSION SHOULD         01062015
               SUBTLY BE DIRECTED FROM OBVIOUS CORRECT USAGE INTO MORE       01062016
               AND MORE COMPLEX SITUATIONS.  INSTRUCTOR SHOULD PROVIDE       01062017
               EXAMPLES OF SITUATIONS AND ASK FOR STUDENTS TO APPLY          01062018
               KNOWLEDGE PREVIOUSLY ACQUIRED TO DIRECT THE BEHAVIOR OF       01062019
               CHILDREN IN SITUATION TO SOME DESIRED GOAL.  AS DISCUSSION01062020
               PROGRESSES, BEGIN TO BRING IN QUESTIONS CONCERNING NATURE     01062021
               AND TYPES OF REINFORCERS AND THE SEQUENCE OF                  01062022
               REINFORCEMENT,                                                01062023
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                          01062 10
*MATERIALS     BLANK                                                         01062  5
*LEVEL         ALL GRADES                                                    01062  8
*GENERAL       ALL CANDIDATES                                                01062  7
*HOURS         1                                                             01062  6
*EVALUATION    BLANK                                                         01062033
*FILE          REINFORCEMENT  ELEMENTARY SCHOOL  SCHEDULES                   01062  9
```

```
*OBJECTIVES     DEVELOP IN STUDENTS AN UNDERSTANDING OF THE IMPORTANT        01063024
                MODIFIERS OF REINFORCEMENT, SPECIFICALLY THE TYPES OF        01063025
                REINFORCEMENT, THE EFFECT OF STRENGTH OF REINFORCEMENT,      01063026
                AND THE EFFECT OF SCHEDULES OF REINFORCEMENT AS THEY APPLY   01063027
                TO THE ELEMENTARY SCHOOL SETTING.                            01063028
*PREREQUISITE   PREVIOUS MODULES ON REINFORCEMENT AND THE CONTROL OF HUMAN   01063029
                BEHAVIOR.                                                    01063030
*EXPERIENCE     CONTENT LECTURE ON VARIETY, STRENGTH AND SCHEDULE OF         01063011
                REINFORCEMENT.  WORKING FROM EXAMPLES DEVELOPED IN           01063012
                PREVIOUS MODULE ON APPLICATION OF REINFORCEMENT IN THE       01063013
                ELEMENTARY SCHOOL SHOW HOW THE EFFECT OF REINFORCEMENT IS    01063014
                ALTERED BY DIFFERENCES IN APPLICATION.  CONTENT SHOULD       01063015
                COVER POSITIVE, NEGATIVE AND TOTAL ABSENCE OF                01063016
                REINFORCEMENT+  THE EFFECT STRENGTH OF REINFORCEMENT HAS     01063017
                ON BEHAVIOR+  AND THE EFFECT AND USAGE OF DIFFERENT          01063018
                SCHEDULES OF REINFORCEMENT.  NOTE:  EXAMPLES SHOULD BE       01063019
                BUILT AROUND SITUATIONS ARISING OUT OF PREVIOUS DISCUSSION   01063020
                USING CHILDREN≤S BEHAVIOR AS POINT OF REFERENCE.  STUDENT    01063021
                QUESTIONS, EXAMPLES AND OTHER VERRALIZATIONS SHOULD BE       01063022
                ENCOURAGED.                                                  01063023
*SETTING        LARGE GROUP  COLLEGE                                         01063 10
*MATERIALS      BLANK                                                        01063  5
*LEVEL          ALL GRADES                                                   01063  8
*GENERAL        ALL CANDIDATES                                               01063  7
*HOURS          1                                                            01063  6
*EVALUATION     MULTIPLE-CHOICE EXAMINATION INCLUDING BOTH MASTERY AND       01063031
                DISCRIMINATION ITEMS.                                        01063032
*FILE           REINFORCEMENT  APPLICATION OF PRINCIPLES  ELEMENTARY         01063  9
                SCHOOL                                                       01063
```

```
*OBJECTIVES     DEVELOP UNDERSTANDING OF THE MEANING OF THE CONCEPT          01064020
                [INTRINSIC MOTIVATION[ BY USE OF NON-EXEMPLARS AS WELL AS    01064021
                EXAMPLES FROM STUDENTS≤S EXPERIENCE, AND OF THE NATURE AND   01064022
                STAGING OF THIS CONCEPT.  MODULE SHOULD BEGIN AN             01064023
                UNDERSTANDING OF HOW CONCEPT MAY BE APPLIED IN THE           01064024
                ELEMENTARY CLASSROOM.                                        01064025
*PREREQUISITE   PREVIOUS MODULES ON REINFORCEMENT AND MOTIVATION AND         01064026
                EXTENSIVE EXPERIENCE IN [PLAYING THE GAME[ OF MAKING         01064027
                CAUSAL INFERENCES ABOUT HUMAN BEHAVIOR.                      01064028
*EXPERIENCE     DISCUSSION OF THE NATURE AND DEVELOPMENT OF INTRINSIC        01064011
                MOTIVATION IN CHILDREN.  DISCUSSION SHOULD SEQUENTIALLY      01064012
                LEAD FROM A GENERAL DISCUSSION OF INTRINSIC MOTIVATION       01064013
                INCLUDING EXAMPLES OF THE CONCEPT≤S MISUSE TO A DISCUSSION   01064014
                OF THE STAGING OF INTRINSIC MOTIVATION TO VARIOUS            01064015
                STRATEGIES OF HOW INTRINSIC MOTIVATION CAN BE DEVELOPED IN   01064016
                STUDENTS IN THE CLASSROOM.  INSTRUCTOR SHOULD TIE FINAL      01064017
                DISCUSSION BACK TO GENERAL AREA OF REINFORCEMENT AND         01064018
                [SHAPING[ OF BEHAVIOR.                                       01064019
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                         01064 10
*MATERIALS      REPRINT OF J. MCVICKER HUNT≤S ARTICLE, [THE DEVELOPMENT OF   01064  5
                INTRINSIC MOTIVATION[                                        01064
*LEVEL          ALL GRADES                                                   01064  8
*GENERAL        ALL CANDIDATES                                               01064  7
*HOURS          1 ≥PERHAPS 2↑                                                01064  6
*EVALUATION     MULTIPLE-CHOICE EXAMINATION INCLUDING BOTH MASTERY AND       01064029
                DISCRIMINATION ITEMS.  BRIEF PAPER BASED ON PROVIDED         01064030
                SITUATIONAL PERSPECTIVE IN WHICH STUDENT IS ASKED TO         01064031
                ANALYZE CERTAIN SITUATIONS AND OFFER SUGGESTIONS AS TO       01064032
                THEIR APPROACH TO THESE PROBLEMS.                            01064033
*FILE           REINFORCEMENT  MOTIVATION [INTRINSIC[  ELEMENTARY SCHOOL     01064  9
```

```
*OBJECTIVES     PROVIDE STUDENTS WITH AN EXPERIENCIAL BASE IN SOME OF THE 01065028
                USES OF LANGUAGE AND TO BEGIN THE STUDENT VALUING PROCESS 01065029
                FOR LANGUAGE USE AND ACQUISITION.                         01065030
*PREREQUISITE NONE                                                        01065031
*EXPERIENCE     INTRODUCTION TO LANGUAGE, ITS USE AND ACQUISITION.  HAVE  01065011
                STUDENTS COMPLETE A BRIEF EXERCISE ≥10 MINUTES+ CONSISTING01065012
                OF DIFFERENT EXAMPLES OR THEIR APPROXIMATES FROM THE      01065013
                MILLER≤S ANALOGIES TEST.  EACH ITEM SHOULD BE PICKED FOR  01065014
                THE DIFFERENT ANALOGOUS OPERATION IT DEMANDS.  WITHOUT    01065015
                SCORING THE EXERCISE BEGIN THE DISCUSSION BY HAVING THE   01065016
                STUDENTS DISCUSS WHAT THEY THOUGHT THE TEST WAS SUPPOSED  01065017
                TO TEST.  THEN TAKING EACH EXAMPLE AT A TIME, THE         01065018
                INSTRUCTOR SHOULD SHOW THE DIFFERENT OPERATIONS REQUIRED  01065019
                LEADING TO BEREITER≤S PREMISE THAT LOGIC IS THE BASIS OF  01065020
                INTELLIGENCE AND THAT LANGUAGE IS THE BASIS OF LOGIC.     01065021
                CITE SOME OF BEREITER≤S EXAMPLES PERTAINING TO THE        01065022
                INTELLECTUAL GAINS MADE BY DISADVANTAGED CHILDREN AFTER   01065023
                INTENSIVE TRAINING IN LANGUAGE ACQUISITION AND ITS USE IN 01065024
                A LOGICAL STRUCTURE.  USING EXAMPLES FROM BEREITER, SHOW  01065025
                HOW HE CONDUCTS THIS INTENSIVE INSTRUCTION IN LANGUAGE AND01065026
                LOGIC.                                                    01065027
*SETTING        LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE         01065 10
*MATERIALS      ITEMS APPROXIMATING OR DIRECTLY FROM THE MILLER≤S         01065  5
                ANALOGIES TEST.                                           01065
*LEVEL          ALL GRADES                                                01065  8
*GENERAL        ALL CANDIDATES                                            01065  7
*HOURS          1                                                         01065  6
*EVALUATION     LATER EVALUATION OF THE DEGREE TO WHICH THE STUDENTS      01065032
                INCLUDE AN EMPHASIS ON LANGUAGE SKILLS AND THEIR USE IN   01065033
                LOGIC.                                                    01065034
*FILE           LANGUAGE  MILLER≤S ANALOGIES TEST  ANALOGIES              01065  9
```

```
*OBJECTIVES     PROVIDE STUDENTS WITH THE BASIC CONTENT FOUNDATIONS OF THE01066023
                NATURE, USE AND ROLE OF LANGUAGE AND THE COURSE OF ITS    01066024
                ACQUISITION.                                              01066025
*PREREQUISITE PREVIOUS MODULE ON LANGUAGE                                 01066026
*EXPERIENCE     LANGUAGE CONTENT LECTURE.  BEGINNING WITH THE PREMISE THAT01066011
                NATURE OR BIOLOGY IS IMPORTANT FOR LANGUAGE ACQUISITION,  01066012
                BUT THAT LEARNING OPPORTUNITIES ARE ALSO IMPORTANT,       01066013
                BRIEFLY DEVELOP THE NATURE, USE, AND ROLE OF LANGUAGE IN  01066014
                OUR CULTURE AND ESPECIALLY IN THE LEARNING-EDUCATIONAL    01066015
                SETTING.  DISCUSS THE SYSTEM INCLUDING PHONEMES,          01066016
                MORPHEMES, WORDS, WORD MEANING AND WORD USE.  ALSO BRIEFLY01066017
                DISCUSS THE PRODUCTION OF SOUND AND THE SEQUENCING OF     01066018
                PHONEMES.  THEN TURN TO THE ACQUISITION OF LANGUAGE AND   01066019
                THE USE OF ITS SYSTEMS OF GRAMMER, SYNTAX, AND LEXICON.   01066020
                FINISH WITH A DISCUSSION OF LANGUAGE DEVELOPMENT AS CODING01066021
                AND SYSTEMIZATION.                                        01066022
*SETTING        LARGE GROUP  COLLEGE                                      01066 10
*MATERIALS      BLANK                                                     01066  5
*LEVEL          ALL GRADES                                                01066  8
*GENERAL        ALL CANDIDATES                                            01066  7
*HOURS          1-2                                                       01066  6
*EVALUATION     MULTIPLE-CHOICE EXAMINATION INCLUDING BOTH MASTERY AND    01066027
                DISCRIMINATION ITEMS LATER EVALUATION OF THE PROPER USE OF01066028
                LANGUAGE CONSIDERATIONS IN ANALYZING LEARNING TASKS AND   01066029
                APPLYING LEARNING PRINCIPLES.                             01066030
*FILE           LANGUAGE  ROLE OF CULTURE  LEARNING                       01066  9
```

```
*OBJECTIVES    TO INTRODUCE STUDENTS TO THE CONDITIONS IN SOCIETY AND     01067028
               CULTURE WHICH HAVE A DETERMINANT EFFECT ON THE DEVELOPMENT01067029
               OF LANGUAGE SKILLS IN CHILDREN, AND ACCORDINGLY, THE        01067030
               DEVELOPMENT OF INTELLIGENCE.                                01067031
*PREREQUISITE  PREVIOUS MODULES ON LANGUAGE                                01067032
*EXPERIENCE    DISCUSSION OF LANGUAGE AS A SOCIAL AND CULTURAL             01067011
               DETERMINANT.  BEGIN BY ASKING THE STUDENTS TO               01067012
               DEVELOP REASONS WHY BEREITERS APPROACH OF                   01067013
               INTENSIVE TRAINING IN THE PRE-SCHOOL WOULD SHOW MARKED      01067014
               GAINS IN THE INTELLIGENCE OF CHILDREN CLASSED AS            01067015
               DISADVANTAGED AND SHOW LITTLE OR NO GAINS IN CHILDREN OF    01067016
               MORE MIDDLE-CLASS CIRCUMSTANCE.  AS THE DISCUSSION          01067017
               DEVELOPS AROUND SPECIFIC BEHAVIORAL DIFFERENCES IN THE      01067018
               ENVIRONMENTS OF THE TWO DIFFERENT CLASSES OF CHILDREN, THE01067019
               INSTRUCTOR SHOULD GUIDE THE DISCUSSION TOWARD THE CONSTANT01067020
               LANGUAGE DIFFERENCES RELATED TO THE SUGGESTED BEHAVIORAL    01067021
               DIFFERENCES.  FACTORS TO BE PAID SPECIAL ATTENTION WOULD    01067022
               INCLUDE OPPORTUNITY TO USE LANGUAGE, VARIETY OF LANGUAGE    01067023
               STIMULUS EXPOSURE, DIFFERENCES IN THE COMPLEXITY OF         01067024
               STRUCTURE, SPECIFICITY OF DESCRIPTIVE CONCEPTS, USE OF      01067025
               RELATIONAL AND OTHER OPERATIONAL WORDS, AND IMMEDIACY OF    01067026
               BOTH PERCEPTION AND LANGUAGE.                               01067027
*SETTING       LARGE GROUP  SMALL GROUP >1-12 STUDENTS+  COLLEGE           01067 10
*MATERIALS     BLANK                                                       01067  5
*LEVEL         ALL GRADES                                                  01067  8
*GENERAL       ALL CANDIDATES                                              01067  7
*HOURS         1                                                           01067  6
*EVALUATION    LATER EVALUATION OF STUDENTS ANALYSIS AND APPLICATION IN    01067033
               REGARD TO LANGUAGE DEVELOPMENT IN A SPECIFIC ENVIRONMENT.   01067034
*FILE          LANGUAGE SKILLS  SOCIAL + CULTURAL DETERMINANT              01067  9
```

```
*OBJECTIVES    TO CONTINUE TO ASSOCIATE THE IDEA OF LANGUAGE AS A SOCIAL 01068033
               AND CULTURAL DETERMINANT AND TO DIFFERENTIATE FROM THIS     01068034
               ASSOCIATION THE SOCIAL USES OF LANGUAGE AND THE USE OF      01068035
               LANGUAGE TO TRANSMIT KNOWLEDGE AND PERFORM CONCEPTUAL       01068036
               OPERATIONS.                                                 01068037
*PREREQUISITE  PREVIOUS MODULES ON LANGUAGE                                01068038
*EXPERIENCE    CONTINUED DISCUSSION OF LANGUAGE AS A SOCIAL AND CULTURAL 01068011
               DETERMINANT.  THE ESSENCE OF THIS MODULE IS THE             01068012
               DIFFERENTIATION BETWEEN THE SOCIAL USE OF LANGUAGE AND THE01068013
               USE OF KNOWLEDGE TO TRANSMIT LANGUAGE AND PERFORM           01068014
               CONCEPTUAL OPERATIONS.  THE INSTRUCTOR SHOULD FIRST         01068015
               DISCUSS DIFFERENT LANGUAGE SYSTEMS WITHIN OUR OWN SOCIETY 01068016
               SUCH AS ONE FOUND IN THE GHETTO OR IN PARTICULAR ISOLATED 01068017
               UNITS SUCH AS THE DUTCH OR POLISH+ AS COMPARED TO THE       01068018
               PREDOMINANT SYSTEM USED BY THE MIDDLE CLASS.  THE           01068019
               COMPARISON SHOULD BE BASED ON THE NATURE OF MORPHEMES,      01068020
               SYNTAX AND PRIMARY PURPOSE OF THE LANGUAGE.  THE FOCUS      01068021
               SHOULD BE ON THE IDEA THAT ALL CULTURES USE LANGUAGE        01068022
               EFFECTIVELY TO EXPRESS SENTIMENTS, EMOTIONS, THE VICARIOUS01068023
               SHARING OF EXPERIENCES, AND TO KEEP THE VARIOUS SOCIAL      01068024
               MACHINERY RUNNING.  WHAT IS MISSING SHOULD BE POINTED OUT 01068025
               AS LESS OF THE FORMS AND STRUCTURES USED TO EXPLAIN, TO     01068026
               DESCRIBE, TO INSTRUCT, TO INQUIRE, TO ANALYZE, ETC.  THE    01068027
               INSTRUCTOR SHOULD THEN POINT TO THE RESEARCH SUPPORTED      01068028
               DIFFERENCES BETWEEN DISADVANTAGED CHILDREN AND MIDDLE       01068029
               CLASS CHILDREN IN THE USE OF LANGUAGE AND SHOW THAT THESE 01068030
               DIRRERENCES ARE DUE TO THE STIMULUS BOUNDEDNESS OF          01068031
               DISADVANTAGED LANGUAGE.                                     01068032
*SETTING       LARGE GROUP  SMALL GROUP >1-12 STUDENTS+  COLLEGE           01068 10
```

```
*MATERIALS     BLANK                                                  01068  5
*LEVEL         ALL GRADES                                             01068  8
*GENERAL       ALL CANDIDATES                                         01068  7
*HOURS         1                                                      01068  6
*EVALUATION    HAVE THE STUDENTS ANALYZE A PAPER IN WHICH TWO STUDENTS  01068039
               DESCRIBE THEIR DIFFICULTY WITH A MATH PROBLEM TO THE     01068040
               TEACHER WITH ONE OF THE CHILDREN RELATING THE PROBLEM TO 01068041
               THE SPECIFIC POINT IN THE EXERCISE AND GENERALLY         01068042
               INDICATING HIS DISLIKE FOR MATH WHILE THE OTHER CHILD    01068043
               INDICATES HIS DIFFICULTY AS NOT FULLY UNDERSTANDING THE  01068044
               MATHEMATICAL OPERATION AND INDICATING WHERE THE RELATIONAL01068045
               BREAK OCCURS.                                            01068046
*FILE          LANGUAGE  KNOWLEDGE  CONCEPTUAL OPERATIONS             01068  9

*OBJECTIVES    TO IDENTIFY LANGUAGE AS A TOOL FOR TEACHING CONCEPTS AND  01069031
               PRESENTING THE BASIC CONCEPTS OF ORGANIZATION AND METHOD  01069032
               FOR USING LANGUAGE IN THIS MANNER.                        01069033
*PREREQUISITE  PREVIOUS MODULES ON LANGUAGE                              01069034
*EXPERIENCE    CONTENT LECTURE ON THE USE OF LANGUAGE AS A TEACHING      01069011
               INSTRUMENT.  CONTENT TO BE COVERED SHOULD INCLUDE LANGUAGE01069012
               IN THE LEARNING SITUATION AS A SELFCONSISTENT             01069013
               REPRESENTATION OF REALITY THAT DEALS IN TRUE AND FALSE    01069014
               STATEMENTS THE PURPOSE OF WHICH IS TO PRESENT CONCEPTUAL  01069015
               EXEMPLARS AND NONEXEMPLARS, AS INEFFECTIVE IN A TEACHING  01069016
               SITUATION EITHER BECAUSE THE LANGUAGE IS INADEQUATE OR THE01069017
               LEARNER≤S UNDERSTANDING OF THE LANGUAGE IS INADEQUATE, AS 01069018
               BEING COMPOSED OF REALITY BASED IDENTITY STATEMENTS THEN  01069019
               RELATED TO THE CONCEPTUAL STATEMENT, AND AS BEING COMPOSED01069020
               OF THREE KINDS OF SECONDORDER CONCEPTUAL STATEMENTS WHICH 01069021
               ARE IDENTIFIED AS 1↑ POLAR CONCEPTS, 2↑ NONPOLAR CONCEPTS 01069022
               THAT ARE SHARED BY ONLY SOME OF THE MEMBERS OF THE        01069023
               IDENTITY CLASS, AND 3↑ NONPOLAR CONCEPTS THAT ARE SHARED  01069024
               BY ALL MEMBERS OF THE IDENTITY CLASS.  THE INSTRUCTOR     01069025
               SHOULD BEGIN BY OUTLINING THIS CONTENT AND THEN, USING    01069026
               EXAMPLES FROM BEREITER≤S APPROACH TO TEACHING THE         01069027
               DISADVANTAGED APPLY THESE CONCEPTS TO SPECIFIC TEACHING   01069028
               EXAMPLES.  THE INSTRUCTOR SHOULD USE EXAMPLES OF TEACHING 01069029
               BY THIS METHOD FROM A VARIETY OF SIMPLE CIRCUMSTANCES.    01069030
*SETTING       LARGE GROUP  COLLEGE                                   01069 10
*MATERIALS     BLANK                                                  01069  5
*LEVEL         ALL GRADES                                             01069  8
*GENERAL       ALL CANDIDATES                                         01069  7
*HOURS         1                                                      01069  6
*EVALUATION    EVALUATED IN ANOTHER MODULE CONCERNED WITH TEACHING A     01069035
               CONCEPT↓ MULTIPLE-CHOICE EXAMINATION OF MASTERY ITEMS OVER01069036
               CONTENT.                                                  01069037
*FILE          LANGUAGE  TEACHING TECHNIQUE  POLAR CONCEPTS           01069  9

*OBJECTIVES    TO GENERALIZE THE MODEL OF LANGUAGE AS A TEACHING TOOL    01070025
               INTO A VARIETY OF AREAS AND TO BEGIN EXPANDING THE USE OF 01070026
               LANGUAGE AS A MEANS OF TEACHING CONCEPTS INTO EVEN MORE   01070027
               ADVANCED FORMS OF USE.                                    01070028
*PREREQUISITE  PREVIOUS MODULES ON LANGUAGE                              01070029
*EXPERIENCE    DISCUSSION OF TEACHING ALL SUBJECTS AS A LANGUAGE AND THE 01070011
               USE OF LANGUAGE IN TEACHING IN THE ELEMENTARY SCHOOL.  THE01070012
               INSTRUCTOR SHOULD BEGIN BY ASKING STUDENTS TO SUGGEST WAYS01070013
               IN WHICH THE CONTENT FROM THE PREVIOUS LECTURE COULD BE   01070014
               USED TO FORM THE BASIS FOR INSTRUCTION IN ARITHMETIC.     01070015
               AFTER EXPANDING THIS AREA FOR A BRIEF PERIOD ≥THE         01070016
```

```
              INSTRUCTOR CAN USE BEREITERSS EXAMPLES TO PRIME THIS      01070017
              DISCUSSION+ ASK HOW THIS SYSTEM WOULD APPLY TO OTHER AREAS01070018
              ESPECIALLY THOSE WHICH SEEM LESS SYSTEMATIZED.  THIS      01070019
              SHOULD LEAD TO A DISCUSSION OF THE TEACHERSS GENERAL USE  01070020
              OF LANGUAGE IN DEALING WITH THE STUDENTS AND ESPECIALLY   01070021
              THE IMPORTANCE OF CLARITY AND CONSISTENCY.  ASK THE       01070022
              STUDENTS TO TRY TO DEVELOP IDEAS ABOUT THE USE OF LANGUAGE01070023
              AS A TEACHING TOOL BEYOND THE LEVEL OF TEACHING CONCEPTS. 01070024
*SETTING      SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01070 10
*MATERIALS    BLANK                                                     01070  5
*LEVEL        ALL GRADES                                                01070  8
*GENERAL      ALL CANDIDATES                                            01070  7
*HOURS        1                                                         01070  6
*EVALUATION   LEVEL AND QUALITY OF STUDENT PARTICIPATION AND LATER      01070030
              ANALYSIS OF ABILITY AND WILLINGNESS TO APPLY CONCEPTS AND 01070031
              PRINCIPLES.                                               01070032
*FILE         LANGUAGE  TEACHING CONCEPTS  BEREITERSS                   01070  9
```

```
*OBJECTIVES   TO HELP STUDENTSS ORGANIZE THEIR THINKING ON PERSONAL     01071029
              EXPERIENCES TO LANGUAGE CONCEPTS.                         01071030
*PREREQUISITE NONE                                                      01071031
*EXPERIENCE   DISCUSSION OF THE DIFFERENCES BETWEEN LISTENING, READING, 01071011
              AND WRITING OR SPEAKING.  IN THIS MODULE, THE INSTRUCTOR  01071012
              SHOULD BEGIN BY LECTURING ON SOME EDUCATIONAL TOPIC AND IN01071013
              DOING SO SPEAK QUITE RAPIDLY AND ADD AS MUCH COMPLEXITY TO01071014
              THE TOPIC AS POSSIBLE.  AFTER A BRIEF PERIOD OF THIS, HE  01071015
              SHOULD STOP AND ASK THE STUDENTS IF ANY OF THEM HAD BECOME01071016
              EITHER BORED OR SLEEPY.  ASSUMING A REASONABLE DEGREE OF  01071017
              HONESTY FROM HIS STUDENTS, HE SHOULD THEN ASK IF ANY OF   01071018
              THEM EVER BECAME SLEEPY AS THEY READ.  WITH THE PRECEEDING01071019
              AFFIRMATIVE ANSWERS IN HAND, HE SHOULD THEN ASK THEM,     01071020
              DISALLOWING THE CONDITION OF TIREDNESS, IF THE SAME       01071021
              PHENOMENA OCCURRED WHEN THEY WERE EITHER SPEAKING OR      01071022
              WRITING.  WITH THE PRECEEDING NEGATIVE ANSWERS, HE SHOULD 01071023
              THEN ASK THEM TO TRY TO FIGURE OUT WHAT MIGHT BE THE CAUSE01071024
              OF THE DIFFERENCE.  AS THE DISCUSSION DEVELOPS, HE SHOULD 01071025
              DIRECT THE REMARKS TO THE DIFFERENCES BETWEEN DECODING AND01071026
              ENCODING IN LANGUAGE AND THE UNDERLYING COGNITIVE         01071027
              PROCESSES INVOLVED IN EACH.                               01071028
*SETTING      BLANK  COLLEGE                                            01071 10
*MATERIALS    BLANK                                                     01071  5
*LEVEL        ALL GRADES                                                01071  8
*GENERAL      ALL CANDIDATES                                            01071  7
*HOURS        1                                                         01071  6
*EVALUATION   CLASS PARTICIPATION IN ANALYZING SITUATION.               01071032
*FILE         LANGUAGE  ENCODING  DECODING                              01071  9
```

```
*OBJECTIVES   PRE-ORGANIZE STUDENT THINKING ON A PERSONAL EXPERIENTIAL  01072031
              BASIS TOWARD SEQUENTIAL CONTENT AND LEARNING ORGANIZATION 01072032
              AND BEGIN THE DEVELOPMENT OF STUDENT BEHAVIORS IN LEARNING01072033
              AND TASK ANALYSIS.                                        01072034
*PREREQUISITE NONE  ≥SOME ORIENTATION TO LEARNING SUCH AS PREVIOUS      01072035
              MODULE WOULD BE ADVANTAGEOUS+                             01072036
*EXPERIENCE   STUDENT EXERCISE FOR PURPOSE OF DEVELOPING AN EXPERIENTIAL01072011
              BASE FOR THE UNDERSTANDING AND INTEGRATION OF THE CONCEPTS01072012
              AND PRINCIPLES INVOLVED IN SEQUENTIAL LEARNING ACTIVITIES.01072013
              INSTRUCTOR SHOULD DEVELOP A PROBLEM OF HIS OWN CHOICE     01072014
              ≥SUCH AS THE DERIVATION OF SOME SIMPLE MATH FORMULA OR THE01072015
              RATIONALE BEHIND A PARTICULAR PRINCIPLE, ETC.+ AND ASK THE01072016
```

```
                STUDENTS TO ATTEMPT TO SOLVE IT ≥THE PROBLEM SHOULD BE      01072017
                DIFFICULT ENOUGH SO THAT NONE OR JUST A FEW ARE ABLE TO     01072018
                ARRIVE AT THE CORRECT SOLUTION WITHOUT FURTHER              01072019
                INFORMATION+.  THE INSTRUCTOR SHOULD THEN FEED IN           01072020
                PARTICULAR INFORMATION WHICH ENABLES THE STUDENTS TO SOLVE01072021
                THE PROBLEM.  DISCUSSION SHOULD THEN LEAD TO WHAT WERE THE01072022
                SPECIFIC TYPES OF CONTENT WHICH WERE PREREQUISITE TO THE    01072023
                SOLUTION OF THAT PROBLEM. IT SHOULD THEN LEAD TO THE        01072024
                SPECIFIC LEARNING ACTIVITIES INVOLVED IN EACH TYPE OF       01072025
                CONTENT PREREQUISITE.  WHILE THIS WILL NOT BE A REFINED     01072026
                DISCUSSION OF SPECIFIC TYPES OF LEARNING, IT SHOULD BE      01072027
                DIRECTED TOWARD THE SIMPLE TO COMPLEX SEQUENTIAL            01072028
                ARRANGEMENT IN A LEARNING SITUATION.  ACTIVITIES WHICH THE01072029
                LEARNER ACTUALLY ENGAGES IN SHOULD BE EMPHASIZED.           01072030
*SETTING        LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE           01072 10
*MATERIALS      A LEARNING PROBLEM COMPLEX ENOUGH TO BE DIFFICULT FOR       01072  5
*LEVEL          ALL GRADES                                                  01072  8
*GENERAL        ALL CANDIDATES                                              01072  7
*HOURS          1/2-1                                                       01072  6
*EVALUATION     CLASS PARTICIPATION IN DEVELOPING EXAMPLES AND ANALYZING    01072037
                SITUATION                                                   01072038
*FILE           LEARNING  PERSONAL EXPERIENCES  STUDENT BEHAVIORS           01072  9
```

```
*OBJECTIVES     DEVELOP STUDENT INTEREST IN THE ENTIRE BREADTH AND VARIETY01073028
                OF LEARNING, BEGIN DEVELOPMENT OF UNDERSTANDING AS TO HOW 01073029
                IT OPERATES DIFFERENTIALLY IN INDIVIDUAL CHILDREN, AND      01073030
                PROVIDE A MODEL OF INTELLECTUAL GROWTH TO BE RETURNED TO    01073031
                IN FUTURE MODULES.                                          01073032
*PREREQUISITE SOME EXPERIENCE IN ANALYSIS OF HUMAN BEHAVIOR AND THE         01073033
                MAKING OF CASUAL INFERENCES ABOUT SUCH BEHAVIOR.            01073034
*EXPERIENCE     INTRODUCTION TO AND DISCUSSION OF THE SEQUENTIAL            01073011
                ARRANGEMENT OF HUMAN LEARNING.  MODULE SHOULD PROCEED       01073012
                ACCORDING TO THE FOLLOWING STEPS:  1+ VISUAL ≥FILM CUT+     01073013
                AND DESCRIPTIVE INTRODUCTION INTO A LEARNING EXPERIENCE     01073014
                AND A DISCUSSION OF THE VARIOUS BEHAVIORS EXHIBITED AND     01073015
                INFERED ≥INCLUDING A WIDE VARIETY OF TYPES OF LEARNING      01073016
                FROM SIMPLE ASSOCIATIONS AND DISCRIMINATIONS TO MORE        01073017
                COMPLEX PROBLEM-SOLVING BEHAVIORS+, 2+ MOVE FROM THIS TO A01073018
                DISCUSSION OF THE VARIOUS BEHAVIORS HAVING STUDENTS         01073019
                PROVIDE FROM PERSONAL EXPERIENCE OF THE TYPES OF LEARNING 01073020
                OPERATIONS IN WHICH THEY ENGAGE, AND 3+ PRESENT AND         01073021
                DISCUSS BRUNER≤S MODEL OF INTELLECTUAL GROWTH DRAWING IN   01073022
                EXAMPLES OF THE TYPES OF LEARNING WHICH MUST TAKE PLACE TO01073023
                ACHIEVE THIS INTELLECTUAL GROWTH.  FINISH BY DISCUSSING     01073024
                ENTIRE UPCOMING LIST OF LEARNING MODULES AND EXPECTED       01073025
                STUDENT BEHAVIOR UPON COMPLETION OF THAT SEQUENCE OF        01073026
                INSTRUCTION.                                                01073027
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                        01073 10
*MATERIALS      FILM CUT OF ELEMENTARY CHILDREN ATTEMPTING TO LEARN SOME    01073  5
                LESSON PREFERABLY SPELLING OR MATH FOCUSING ON INDIVIDUAL 01073
                CHILDREN≤S EFFORTS.                                         01073
*LEVEL          ALL GRADES                                                  01073  8
*GENERAL        ALL CANDIDATES                                              01073  7
*HOURS          1-2                                                         01073  6
*EVALUATION     NATURE AND DEGREE OF STUDENT PARTICIPATION IN THE           01073035
                DISCUSSION                                                  01073036
*FILE           LEARNING  INSTRUCTION                                       01073  9
```

```
*OBJECTIVES    DEVELOP UNDERSTANDING AND GENERALIZATION OF THE CONCEPTS, 01074030
               PRINCIPLES AND SEQUENTIAL ORDERING OF SIMPLE LEARNING     01074031
               BEHAVIORS AND CONTINUE DEVELOPMENT OF LEARNING TASK       01074032
               ANALYSIS.                                                 01074033
*PREREQUISITE  PREVIOUS EXPERIENTIAL AND MOTIVATIONAL INTRODUCTION TO    01074034
               LEARNING.                                                 01074035
*EXPERIENCE    CONTENT LECTURE ON SIMPLE LEARNING BEHAVIORS ≥DEVELOPED   01074011
               AROUND THE TYPOLOGY AND SEQUENTIAL ORDERING SUGGESTED BY  01074012
               GAGNE↑.  USING EXAMPLES DEVELOPED FROM PREVIOUS DISCUSSION01074013
               AND STUDENT EXPERIENCE IN ANALYZING A LEARNING TASK       01074014
               DEVELOP CONCEPTS, PRINCIPLES AND SEQUENTIAL ORDERING OF   01074015
               SIMPLE LEARNING BEHAVIORS, FOCUS FIRST ON EXEMPLARS FROM  01074016
               PREVIOUS DISCUSSION AND THEN PRESENT AND CALL FOR EXAMPLES01074017
               OF HOW THESE OBVIOUSLY OCCUR IN THE ELEMENTARY CLASSROOM  01074018
               AND FINALLY DEVELOP DISCUSSION ON HOW TEACHER ORGANIZATION01074019
               OF LEARNING TASKS IS CRITICAL FOR BOTH MOTIVATIONAL       01074020
               PURPOSES AND SUCCESSFUL LEARNING.  DIRECT ATTENTION TO THE01074021
               IDEA THAT MANY SIMPLE BEHAVIORS WILL ALREADY BE PRESENT IN01074022
               THE LEARNER SO THAT IN ADDITION TO TASK ANALYSIS IT IS    01074023
               ALSO NECESSARY TO ANALYZE THE CURRENT STATE OF THE        01074024
               LEARNERS KNOWLEDGE AND ABILITY.  USE EXAMPLES FROM        01074025
               ELEMENTARY SCHOOL SITUATIONS TO SITUATIONS INVOLVING      01074026
               DOCTORAL OR OTHER GRADUATE CANDIDATES TO SHOW THAT THE    01074027
               SEQUENCE IS SIMILAR AT ALL DIFFERENT LEVELS OF AGE AND    01074028
               DEVELOPMENT ALTHOUGH MORE PREVALENT AT EARLIER AGES.      01074029
*SETTING       LARGE GROUP  COLLEGE                                      01074 10
*MATERIALS     DEVELOP DIFFERENT EXAMPLES OF WHERE THESE LEARNING        01074  5
               BEHAVIORS OCCUR.                                          01074
*LEVEL         ALL GRADES                                                01074  8
*GENERAL       ALL CANDIDATES                                            01074  7
*HOURS         1-2                                                       01074  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION AND LATER ASSESSMENT OF       01074036
               LEARNING TASK ANALYSIS EXERCISES.                         01074037
*FILE          LEARNING  GAGNE  TASK ANALYSIS                            01074  9
```

```
*OBJECTIVES    TO PROVIDE THE STUDENTS WITH AN EXPERIENTIAL BASE FOR     01075037
               UNDERSTANDING AND APPLYING SIMPLE FORMS OF LEARNING       01075038
               ESPECIALLY AS RELATED TO THE CLASSROOM.                   01075039
*PREREQUISITE  PREVIOUS MODULE ON LEARNING                               01075040
*EXPERIENCE    DISCUSSION OF SIMPLE FORMS OF LEARNING.  THE ESSENCE OF   01075011
               THIS MODULE IS TO PROVIDE STUDENTS WITH AN EXPERIENTIAL   01075012
               BASE FOR THE UNDERSTANDING OF SIMPLE FORMS OF LEARNING.   01075013
               SET AS FOLLOWS: BEFORE CLASS, ARRANGE WITH TWO STUDENTS TO01075014
               SIT IN THE BACK OF THE CLASS ON EACH SIDE OF THE ROOM AND 01075015
               FOR THE FIRST 10 MINUTES OF CLASS, RECORD THE NUMBER OF   01075016
               HANDS RAISED ON EACH RESPECTIVE SIDE OF THE CLASSROOM FOR 01075017
               EACH QUESTION ASKED BY THE INSTRUCTOR.  THE INSTRUCTOR    01075018
               SHOULD THEN BEGIN DISCUSSION BY CONTINUING EXAMPLES OF    01075019
               LEARNING BEHAVIORS FROM THE PREVIOUS MODULE.  AS HE ASKS  01075020
               QUESTIONS AND RESPONDS TO STUDENT HANDS, HE SHOULD ATTEND 01075021
               TO ONLY ONE SIDE OF THE CLASSROOM STARTING IN A SPECIFIC  01075022
               AREA AND AS HANDS CONTINUE TO INCREASE IN NUMBER EXPAND   01075023
               THE AREA COVERED.  AT THE END OF 10 MINUTES OR SO, HE     01075024
               SHOULD STOP THE QUESTIONING AND ASK THE STUDENTS TO THINK 01075025
               FOR A MINUTE AND THEN WRITE ON A SLIP OF PAPER THE NUMBER 01075026
               OF TIMES IN THE IMMEDIATELY PRECEEDING PERIOD THAT THEY   01075027
               HAD RAISED THEIR HANDS AND THEN TO ALSO INDICATE THE      01075028
               APPROXIMATE GPA THEY HAD ACHIEVED SO FAR IN COLLEGE ≥ALL  01075029
               THESE RESPONSES SHOULD BE HANDLED ANONYMOUSLY↑.  THE      01075030
               INSTRUCTOR SHOULD THEN SHOW HOW THE RAISING OF HANDS ON   01075031
               ONE SIDE OF THE ROOM INCREASED WITH EACH QUESTION AND THE 01075032
               OTHER SIDE EXTINGUISHED.  THEN USING A FOUR-CELL          01075033
               CONTINGENCY TABLE, SHOW VISABLY THE RELATIONSHIP BETWEEN  01075034
               SUCCESS ≥GPA↑ AND TENDENCY TO RESPOND IN CLASS ≥HAND      01075035
               RAISING↑.                                                 01075036
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                      01075 10
*MATERIALS     BLANK                                                     01075  5
*LEVEL         ALL GRADES                                                01075  8
*GENERAL       ALL CANDIDATES                                            01075  7
*HOURS         1/3-1/2                                                   01075  6
*EVALUATION    LATER EVALUATION OF ANALYSIS AND APPLICATION OF SIMPLE    01075041
               FORMS OF LEARNING.                                        01075042
*FILE          LEARNING  RESPONDING  EXPERIENCES                         01075  9

*OBJECTIVES    TO CONTINUE TO FORM ASSOCIATIONS BETWEEN APPARANT CAUSE   01076029
               AND EFFECT AND THE CONDITIONS SURROUNDING SIMPLE FORMS OF 01076030
               LEARNING.                                                 01076031
*PREREQUISITE  PREVIOUS MODULE ON SIMPLE FORMS OF LEARNING               01076032
*EXPERIENCE    CONTINUED DISCUSSION OF SIMPLE FORMS OF LEARNING.  BASED  01076011
               UPON THE RESULTS OF THE PREVIOUS MODULE, THE INSTRUCTOR   01076012
               SHOULD ASK THE STUDENTS TO EXPLAIN WHY STUDENT RESPONSE   01076013
               ≥AS INDICATED BY HAND-RAISING↑ ON ONE SIDE OF THE ROOM    01076014
               INCREASED AND ON THE OTHER SIDE DECREASE, FAILED TO       01076015
               APPEAR, OR DISAPPEARED ENTIRELY.  DISCUSSION SHOULD BE    01076016
               DIRECTED TO THE SPECIFIC BEHAVIORS EXHIBITED INCLUDING    01076017
               INSTRUCTOR QUESTIONS, HAND-RAISING AS RELATED TO BOTH THE 01076018
               SPECIFIC QUESTIONS AND AS A FORM OF RESPONSE TO CLASSROOM 01076019
               SITUATION AND TEACHER-ATTENTION, THE NATURE OF            01076020
               TEACHER-RESPONSE, AND THE LOCATIONAL ASPECT OF THE        01076021
               INCREASED HAND-RAISING.  THE INSTRUCTOR SHOULD THEN       01076022
               PROCEED TO ASK WHY THERE WAS A RELATIONSHIP BETWEEN GPA   01076023
               AND HAND-RAISING.  THIS DISCUSSION SHOULD BE DIRECTED TO  01076024
               INCLUDING THE DISCREPENCY BETWEEN NEED FOR FEEDBACK AND    01076025
               FAILURE TO RAISE QUESTIONS OR TEST ANSWERS, THE IMPORTANCE01076026
               OF REWARD, AND THE ESTABLISHMENT OF A BEHAVIOR PATTERN    01076027
               OVER TIME.                                                01076028
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                      01076 10
*MATERIALS     BLANK                                                     01076  5
*LEVEL         ALL GRADES                                                01076  8
*GENERAL       ALL CANDIDATES                                            01076  7
*HOURS         1/2-1                                                     01076  6
*EVALUATION    LATER EVALUATION OF THE ANALYSIS AND APPLICATION OF SIMPLE01076033
               FORMS OF LEARNING.                                        01076034
*FILE          LEARNING  ASSOCIATIONS                                    01076  9

*OBJECTIVES    TO FORMALLY ESTABLISH THE CONCEPTS AND PRINCIPLES OF      01077027
               SIMPLE FORMS OF LEARNING FOCUSING UPON THE CONDITIONAL    01077028
               ELEMENTS BY WHICH THEY ARE DETERMINED.                    01077029
*PREREQUISITE  PREVIOUS MODULES ON LEARNING                              01077030
*EXPERIENCE    CONTENT LECTURE AND CONTINUED DISCUSSION OF SIMPLE FORMS  01077011
               OF LEARNING.  USING EXAMPLES GENERATED IN THE PREVIOUS    01077012
               MODULES, THE INSTRUCTOR SHOULD DESCRIBE AND DISCUSS THE   01077013
               SIMPLE FORMS OF LEARNING PAYING PARTICULAR ATTENTION TO   01077014
               THE CONDITIONS, OUTCOMES AND CONTINUATION WHICH DETERMINE 01077015
               EACH FORM.  THE CONTENT SHOULD SPECIFICALLY INTRODUCE     01077016
               SIGNAL LEARNING, SIMPLE ASSOCIATIONAL LEARNING, SIMPLE    01077017
               SS - R LEARNING, SIMPLE OPERANT LEARNING.  THE ELEMENTS   01077018
               PARTICULARLY TO BE PAID ATTENTION WOULD BE THE CONCEPTS OF01077019
               STIMULUS, RESPONSE, CONTIGUITY, EFFECT, EMITTED AND       01077020
               ELICITED AND HOW ALL OF THESE APPLY TO EACH LEARNING FORM.01077021
```

```
              THE EMPHASIS SHOULD BE UPON THE CONDITIONS SURROUNDING       01077022
              EACH TYPE OF LEARNING AND THE TYPES OF OUTCOMES AND THE      01077023
              CONDITIONS OF CONTINUATION.                                  01077026
*SETTING      LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE            01077 10
*MATERIALS    BLANK                                                        01077  5
*LEVEL        ALL GRADES                                                   01077  8
*GENERAL      ALL CANDIDATES                                               01077  7
*HOURS        1                                                            01077  6
*EVALUATION   MULTIPLE-CHOICE MASTERY ITEMS AND LATER EVALUATION OF        01077031
              ANALYSIS AND APPLICATION OF SIMPLE FORMS OF LEARNING.        01077032
*FILE         LEARNING  S-R THEORY  SIGNAL LEARNING                        01077  9
```

```
*OBJECTIVES   TO PROVIDE STUDENTS WITH OPPORTUNITIES TO ANALYZE AND        01078028
              APPLY THE CONCEPTS AND PRINCIPLES INHERENT IN SIMPLE FORMS01078029
              OF LEARNING.                                                 01078030
*PREREQUISITE PREVIOUS MODULES ON SIMPLE FORMS OF LEARNING.                01078031
*EXPERIENCE   DISCUSSION OF SIMPLE FORMS OF LEARNING AS THEY OCCUR IN      01078011
              THE ELEMENTARY CLASSROOM.  BEGINNING WITH THE PREVIOUS       01078012
              CLASS EXERCISE IN HAND-RAISING DIRECT THE DISCUSSION BACK 01078013
              TO HOW THIS BEHAVIOR ORIGINALLY BEGAN IN THE ELEMENTARY      01078014
              LEVEL AND HOW IT CONTINUED OVER TIME.  FROM THERE THE        01078015
              DISCUSSIONCAN BE DIRECTED INTO ANY NUMBER OF SITUATIONAL     01078016
              CONDITIONS WHICH OCCUR IN THE ELEMENTARY CLASSROOM           01078017
              PARTICULARY FOCUSING ON TEACHER BEHAVIORS ≥SUCH AS           01078018
              SELECTIVE TEACHER RESPONSE BEHAVIOR TO TEACHER-REWARDING     01078019
              BEHAVIORS BY STUDENTS, THE SITUATION OF THE CHILD DAY        01078020
              DREAMING OR LOOKING OUT THE WINDOW, THE TEACHER BUILDING     01078021
              IN CONDITIONED STIMULUS IN THE CLASSROOM, AND ANY VARIETY 01078022
              OF ADVERSIVE CONDITIONS WITHIN THE ELEMENTARY SCHOOL+.  AT01078023
              ALL TIMES THE DISCUSSION SHOULD DEAL WITH STUDENT            01078024
              ANALYSIS, IDENTIFICATION, AND APPLICATION OF SIMPLE          01078025
              LEARNING PRINCIPLES FROM THE SUGGESTED GENERALIZED           01078026
              EDUCATIONAL SITUATION.                                       01078027
*SETTING      SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                         01078 10
*MATERIALS    BLANK                                                        01078  5
*LEVEL        ALL GRADES                                                   01078  8
*GENERAL      ALL CANDIDATES                                               01078  7
*HOURS        1                                                            01078  6
*EVALUATION   STUDENTS WOULD ANALYZE LEARNING SITUATION IN HOLT≤S WHY      01078032
              CHILDREN FAIL ≥142-45+ IN TERMS OF CONCEPTS AND PRINCIPLES01078033
              INHERENT IN SIMPLE FORMS OF LEARNING.  EACH PAPER WOULD BE01078034
              BE EVALUATED FOR CORRECT AND INCORRECT USE AND               01078035
              APPLICATIONS, NUMBER OF SIMPLE LEARNING BEHAVIORS            01078036
              IDENTIFIED, AND WILLINGNESS TO ENGAGE IN ANALYSIS            01078037
              BEHAVIOR.                                                    01078038
*FILE         LEARNING  ELEMENTARY CLASSROOM                               01078  9
```

```
*OBJECTIVES   INTRODUCE STUDENTS TO THE CONCEPTS AND PRINCIPLES INVOLVED01079032
              IN GENERALIZATION, DISCRIMINATION, SIMPLE CHAINING AND       01079033
              CREATE CONDITIONS WHERE STUDENTS CAN ATTEMPT ANALYSIS AND 01079034
              APPLICATION OF THIS KNOWLEDGE.                               01079035
*PREREQUISITE PREVIOUS MODULES ON SIMPLE FORMS OF LEARNING.                01079036
*EXPERIENCE   CONTENT LECTURE AND DISCUSSION ON GENERALIZATION,            01079011
              DISCRIMINATION AND CHAINING OR (SHAPING(.  THE CONTENT OF 01079012
              THIS MODULE SHOULD DEAL WITH BOTH STIMULUS AND RESPONSE      01079013
              DISCRIMINATION AND GENERALIZATION AND HOW THESE ELEMENTS     01079014
              ARE PREREQUISITE TO BEHAVIORAL CHAINS BASED EITHER ON        01079015
              ASSOCIATION OR REINFORCEMENT ≥SHAPING+.  INSTRUCTOR CAN      01079016
              BEGIN WITH ANY PREVIOUS STUDENT EXAMPLE OF SIMPLE LEARNING01079017
```

```
                IN THE CLASSROOM AND DIRECT DISCUSSION TO THE PROBABLE    01079018
                RESULTS IF SIMILAR RESPONSES ARE RELATED TO DIFFERENT     01079019
                STIMULI, IF DIFFERENT RESPONSES ARE RELATED TO THE SAME   01079020
                STIMULI, AND HOW SIMPLE DISCRIMINATIONS ARE LEARNED.  THIS01079021
                INVARIABLY LEADS TO DISCUSSION OF SIMPLE CHAINS OF        01079022
                BEHAVIOR.  THE INSTRUCTOR SHOULD THEN DIRECT THE          01079023
                DISCUSSION TO SITUATIONS IN WHICH ONE FINDS RESPECTIVELY  01079024
                HOMOGENEOUS AND HETEROGENEOUS CHAINS AND ASK THE STUDENTS 01079025
                TO ANALYZE THE DIFFERENCE BETWEEN THEM.  FINISH BY        01079026
                SUGGESTING A SIMPLE TERMINAL BEHAVIOR AND ASKING STUDENTS 01079027
                TO SUGGEST THE LEARNING STEPS IN ACHIEVING THIS BEHAVIOR. 01079028
                USE THE EXAMPLES TO POINT TO THE WAYS OF ACHIEVING THIS   01079029
                BEHAVIOR VIA EITHER ASSOCIATIONAL CHAINING OR BEHAVIORAL  01079030
                [SHAPING[,                                                01079031
*SETTING        LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE         01079 10
*MATERIALS      BLANK                                                     01079  5
*LEVEL          ALL GRADES                                                01079  8
*GENERAL        ALL CANDIDATES                                            01079  7
*HOURS          1                                                         01079  6
*EVALUATION     MULTIPLE-CHOICE MASTERY ITEMS                             01079037
*FILE           LEARNING  DISCRIMINATION  GENERALIZATION                  01079  9
```

```
*OBJECTIVES     TO INCREASE STUDENT AWARENESS OF THE COMPLEXITY OF THE    01080028
                LEARNING ENVIRONMENT AND TO POINT OUT THE ELEMENTS IN     01080029
                SIMPLE LEARNING THAT ARE GENERALLY APPLICABLE IN MOST     01080030
                LEARNING SITUATIONS.  TO CONTINUE THE PROCESS OF ANALYSIS 01080031
                AND APPLICATION OF CONCEPTS AND PRINCIPLES INHERENT IN    01080032
                SIMPLE FORMS OF LEARNING.                                 01080033
*PREREQUISITE   PREVIOUS MODULES ON LEARNING.                             01080034
*EXPERIENCE     DISCUSSION OF THE FACTORS WITHIN SIMPLE FORMS OF LEARNING 01080011
                WHICH HAVE OBVIOUS DIRECT APPLICATION TO EDUCATIONAL      01080012
                PRACTICE.  IN THIS DISCUSSION, THE INSTRUCTOR SHOULD PICK 01080013
                SEVERAL SIMPLE LEARNING OUTCOMES AND ASK THE CLASS TO     01080014
                RESPECTIVELY ANALYZE AND APPLY THE APPROPRIATE LEARNING   01080015
                CONCEPTS AND PRINCIPLES.  AS THE DISCUSSION PROGRESSES,   01080016
                THE INSTRUCTOR SHOULD DRAW FROM THE DISCUSSION AND        01080017
                IDENTIFY CERTAIN FACTORS AND HOW THEY OPERATE INCLUDING   01080018
                THE FOLLOWING: ACTIVE STUDENT LEARNING BEHAVIOR, FREQUENCY01080019
                OF REPETITION, REINFORCEMENT, AGAIN GENERALIZATION AND    01080020
                DISCRIMINATION, NOVELTY, CONFLICT AND FRUSTRATION.  IN    01080021
                RELATING THESE ASPECTS TO THE CLASSROOM, THE INSTRUCTOR   01080022
                SHOULD EMPHASIZE THAT ALTHOUGH MANY LEARNING OBJECTIVES   01080023
                AND BEHAVIORS ARE BASICALLY SIMPLE, THE LEARNING SITUATION01080024
                AND THE SOCIAL ENVIRONMENT ARE EXTREMELY COMPLEX DEMANDING01080025
                CAREFUL ATTENTION TO ALL POSSIBLE ELEMENTS FOR MAXIMUM    01080026
                LEARNING EFFECTIVENESS.                                   01080027
*SETTING        LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE         01080 10
*MATERIALS      BLANK                                                     01080  5
*LEVEL          ALL GRADES                                                01080  8
*GENERAL        ALL CANDIDATES                                            01080  7
*HOURS          1                                                         01080  6
*EVALUATION     LATER EVALUATION OF STUDENT ABILITY AND WILLINGNESS TO    01080035
                ANALYZE AND APPLY THE CONCEPTS AND PRINCIPLES OF SIMPLE   01080036
                FORMS OF LEARNING.                                        01080037
*FILE           LEARNING  FRUSTRATION  REPETITION                         01080  9
```

```
*OBJECTIVES     TO SPECIFICALLY ASSOCIATE THE MECHANISMS OF SIMPLE FORMS  01081031
                OF LEARNING TO VERBAL LEARNING WITH EMPHASIS ON THE       01081032
                INTERNAL LEARNING CONDITIONS AND THE EXTERNAL SITUATIONAL 01081033
```

```
              CONDITIONS.                                                01081034
*PREREQUISITE PREVIOUS MODULES ON SIMPLE FORMS OF LEARNING.              01081035
*EXPERIENCE   CONTENT LECTURE ON VERBAL LEARNING.  CONTENT TO BE COVERED01081011
              SHOULD INCLUDE VERBAL RECOGNITION, IDENTIFICATION, VERBAL 01081012
              ASSOCIATION AND VERBAL CHAINING, AND THE BEGINNING OF     01081013
              VERBAL MEDIATION.  BESIDES DEVELOPING THE CONCEPTS AND    01081014
              PRINCIPLES INVOLVED IN VERBAL LEARNING ≥ESSENTIALLY THE   01081015
              SAME AS IN OTHER SIMPLE FORMS OF LEARNING+ THE INSTRUCTOR 01081016
              SHOULD PAY ATTENTION TO THE CONDITIONS WHICH SURROUND THE 01081017
              EFFECTIVENESS OF THIS LEARNING INCLUDING INTERFERENCE,    01081018
              FORGETTING OR EXTINCTION, AND THE BASIC ELEMENTS OF       01081019
              CONNOTATION-DENNOTATION ≥GENERALIZATION-DISCRIMINATION+.  01081020
              THE EMPHASIS ON THIS MODULE IS IN THE UNDERLYING LEARNING 01081021
              MECHANISMS RATHER THAN THEIR USE OR IMPORTANCE IN THE     01081022
              LEARNING SITUATION ≥WHICH IS THE FOCUS OF ANOTHER SERIES  01081023
              OF MODULES+.  SPECIFICALLY, THIS WOULD IMPLY ATTENDING TO 01081024
              THE ESTABLISHMENT OF SIMPLE SS - R≤S AND THE IMPORTANCE OF01081025
              THE MEDIATING CONNECTION BETWEEN UNITS IN VERBAL CHAINS.  01081026
              IN ADDITION, CONDITIONS OF THE LEARNING SITUATION SUCH AS 01081027
              SEQUENCE OF VERBAL UNITS, ACTIVE RESPONSE BEHAVIORS,      01081028
              ADDITIONAL NONVERBAL BEHAVIORAL CUES, CLOSNESS OR         01081029
              CONTIGUITY AND REINFORCEMENT SHOULD BE DISCUSSED.         01081030
*SETTING      LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE         01081 10
*MATERIALS    BLANK                                                     01081  5
*LEVEL        ALL GRADES                                                01081  8
*GENERAL      ALL CANDIDATES                                            01081  7
*HOURS        1                                                         01081  6
*EVALUATION   MULTIPLE-CHOICE EXAMINATION AND STUDENTS LATER ABILITY TO 01081036
              ANALYZE AND APPLY THE CONCEPTS AND PRINCIPLES SPECIFICALLY01081037
              RELATED TO VERBAL LEARNING.                               01081038
*FILE         LEARNING  S-R THEORY  CLOSNESS OR CONTIGUITY              01081  9
```

```
*OBJECTIVES   TO PROVIDE THE STUDENTS WITH AN EXPERIENTIAL BASIS FOR    01082038
              UNDERSTANDING THE CONCEPTS AND PRINCIPLES INVOLVED IN     01082039
              LEARNING MULTIPLE DISCRIMINATIONS AND THEN ESTABLISHING   01082040
              THE CONCEPTS AND PRINCIPLES THEMSELVES.                   01082041
*PREREQUISITE PREVIOUS MODULES ON LEARNING                              01082042
*EXPERIENCE   INTRODUCTION TO COMPLEX LEARNING BEHAVIOR.  INSTRUCTOR    01082011
              SHOULD BEGIN BY ASKING THE STUDENTS TO ANALYZE THE        01082012
              LEARNING BEHAVIOR INVOLVED IN SOME SITUATION RELATED TO   01082013
              THEIR OWN COLLEGE EXPERIENCE >SUCH AS DECIDING ON THE     01082014
              PARTNER FOR THE NEXT DATE, OR ON DECIDING ON WHETHER OR   01082015
              NOT TO TAKE A SPECIFIC COURSE+.  THE INSTRUCTOR SHOULD    01082016
              DIRECT DISCUSSION TO MAKING DIFFERENT RESPONSES TO        01082017
              DIFFERENT MEMBERS OF THE SAME COLLECTION.  THE INSTRUCTOR 01082018
              SHOULD THEN ASK STUDENTS TO DESCRIBE WHAT HAPPENED TO THEM01082019
              IN TERMS OF LEARNING WHEN THEY MADE A BAD DECISION.  THIS 01082020
              SHOULD LEAD TO A DISCUSSION OF HOW THEY LEARNED TO MAKE   01082021
              MORE AND MORE APPROPRIATE DECISIONS.  AT THIS POINT, IF   01082022
              THE STUDENTS HAVE NOT YET STATED IT, THE INSTRUCTOR CAN   01082023
              POINT OUT THAT IN FACT EACH MISTAKE WAS THEN STRONGLY     01082024
              ASSOCIATED WITH A PARTICULAR BEHAVIORAL CHAIN WHICH WOULD 01082025
              BE ATTENDED TO IN THE FUTURE AND THAT AS SUCCESS AND      01082026
              FAILURE EITHER POSITIVELY OR NEGATIVELY REINFORCED OVER   01082027
              TIME DISCRIMINATIONS FOR CERTAIN PURPOSES WERE MORE MADE  01082028
              WITH GREATER SUCCESS.  THIS SHOULD LEAD TO THE DISCUSSION 01082029
              OF THE CONDITIONS FOR DEVELOPING MULTIPLE-DISCRIMINATIONS.01082030
              INSTRUCTOR SHOULD POINT OUT THAT IF EACH CHAIN WERE       01082031
              LEARNED IN ISOLATION FROM THE OTHERS THAT THE             01082032
              DISCRIMINATION WOULD BE SIMPLE, BUT THAT LIFE IS RARELY SO01082033
              ORGANIZED.  THE INSTRUCTOR SHOULD THEN SPECIFY THE          01082034
              CONDITIONS WITHIN THE LEARNER AND THE CONDITIONS WITHIN     01082035
              THE LEARNING SITUATION WHICH ARE OPTIMAL FOR LEARNING       01082036
              MULTIPLE DISCRIMINATIONS.                                   01082037
*SETTING      LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE           01082 10
*MATERIALS    BLANK                                                       01082  5
*LEVEL        ALL GRADES                                                  01082  8
*GENERAL      ALL CANDIDATES                                              01082  7
*HOURS        1                                                           01082  6
*EVALUATION   MULTIPLE-CHOICE EXAMINATION OF CONCEPTS AND PRINCIPLES AND01082043
              EVALUATION OF DISCUSSION IN TERMS OF STUDENT PARTICIPATION01082044
              AND WILLINGNESS TO ENGAGE IN ANALYSIS AND APPLICATION       01082045
              BEHAVIORS.                                                  01082046
*FILE         LEARNING  DISCRIMINATIONS                                   01082  9
```

```
*OBJECTIVES   TO DISTINGUISH BETWEEN THE LEVEL OF RELIANCE UPON STIMULUS01083034
              IN THE DIFFERENT LEVELS OF LEARNING AND TO PROVIDE THE      01083035
              PRE-ORGANIZATIONAL SET FOR CONSIDERATION OF HIGHER LEVELS 01083036
              OF LEARNING.                                                01083037
*PREREQUISITE PREVIOUS MODULES ON LEARNING                                01083038
*EXPERIENCE   CONTINUED DISCUSSION OF COMPLEX LEARNING BEHAVIOR.          01083011
              RE-EXPLAIN FOR ABOUT FIVE MINUTES THE NATURE OF             01083012
              HETEROGENEOUS AND HOMOGENEOUS CHAINS BUT USE TWO SPECIFIC 01083013
              EXAMPLES TO RESPECTIVELY POINT OUT THE CONCEPTS AND         01083014
              PRINCIPLES RELATE TO EACH TYPE OF CHAIN.  FOR THE           01083015
              HOMOGENEOUS CHAIN USE ALL COLORS AND FOR THE HETEROGENEOUS01083016
              CHAIN USE DIFFERENT FORMS OF MOVEMENT.  THEN AFTER THIS     01083017
              DISCUSSION ≥BE SURE THE CHAINS ARE PLACED CLEARLY ON THE    01083018
              BOARD AND THEN ERASED AFTER DISCUSSION+ GIVE THE STUDENTS 01083019
              A SHORT QUIZ WHERE ALL THEY HAVE TO DO IS MAKE THE CORRECT01083020
              ASSOCIATION BETWEEN THE EXAMPLE AND THE CONCEPT STIMULUS. 01083021
              HOWEVER, IN THE TEST, BEGIN THE HETEROGENEOUS CHAIN WITH    01083022
              MOVEMENT.  AFTER CORRECTING THE PAPERS, ASK THE STUDENTS    01083023
              WHY THOSE STUDENTS WHO MADE THE IMPROPER ASSOCIATION DID    01083024
              SO.  AFTER WORKING THROUGH THE SIMPLE LEARNING CONDITIONS 01083025
              INVOLVED DRAW ATTENTION TO THE IDEA OF STIMULUSBOUNDEDNESS01083026
              INVOLVED IN THE SIMPLE LEARNING BEHAVIORS AND THE           01083027
              RESULTING MISTAKE IN ASSOCIATING BY STIMULUS OBJECT RATHER01083028
              THAN BY CONCEPT.  THIS DISCUSSION SHOULD THEN CONTINUE      01083029
              WITH THIS CONSIDERATION OF RELIANCE UPON STIMULUS           01083030
              NECESSARY IN LOWER FORMS OF LEARNING BUT REMOVED IN THE     01083031
              MORE ADVANCED FORMS AND THE CRITICAL NATURE OF THIS         01083032
              DIFFERENCE IN GROWTH AND DEVELOPMENT.                       01083033
*SETTING      SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                        01083 10
*MATERIALS    SHORT QUIZ MADE UP OF ASSOCIATIONS BETWEEN LEARNING         01083  5
              CONCEPT AND EXAMPLE.                                        01083
*LEVEL        ALL GRADES                                                  01083  8
*GENERAL      ALL CANDIDATES                                              01083  7
*HOURS        1                                                           01083  6
*EVALUATION   LATER ABILITY OF STUDENTS TO ANALYZE AND APPLY              01083039
              DIFFERENTIALLY THE CONCEPTS AND PRINCIPLES IN A LEARNING    01083040
              TASK.                                                       01083041
*FILE         LEARNING  STIMULUS  GROWTH + DEVELOPMENT                    01083  9
```

```
*OBJECTIVES   PROVIDE STUDENTS WITH EXPERIENCE IN TEACHING CONCEPTS AND 01084020
              EVALUATING THEIR TEACHING RESULTS AS EXPERIENTIAL BASE FOR01084021
              CONTENT AND DISCUSSION OF THE NATURE, ROLE AND SEQUENTIAL 01084022
              POSITION OF A CONCEPT IN LEARNING.                          01084023
*PREREQUISITE PREVIOUS SEQUENCE ON SIMPLE LEARNING BEHAVIORS              01084024
```

```
*EXPERIENCE    EXERCISE IN TEACHING A CONCEPT.  HAVE STUDENTS TAKE AN     01084011
               ASSIGNED CONCEPT, ORGANIZE SOME MEANS OF PRESENTATION AND 01084012
               THEN ATTEMPT TO TEACH THE CONCEPT TO ANOTHER SMALL GROUP  01084013
               OF STUDENTS.  IN ADDITION, HAVE EACH STUDENT DEVELOP SOME 01084014
               MEANS OF ASSESSING THE DEGREE TO WHICH THE CONCEPT HAS    01084015
               BEEN ACQUIRED BY THE OTHER STUDENTS.  INSTRUCTOR SHOULD   01084016
               PICK CONCEPTS WHICH ARE RELATIVELY SIMPLE, RELATED TO SOME01084017
               POPULAR AREA, BUT PROBABLY UNKNOWN, AT LEAST TECHNICALLY, 01084018
               BY MOST STUDENTS.                                         01084019
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01084 10
*MATERIALS     LIST OF CONCEPTS TO BE TAUGHT BY STUDENTS.                01084  5
*LEVEL         ALL GRADES                                                01084  8
*GENERAL       ALL CANDIDATES                                            01084  7
*HOURS         APPROX. 1/2-3 PREP.  + 1-2 CLASS                          01084  6
*EVALUATION    ACTUAL ENGAGING IN THE PRESCRIBED EXERCISES AND LATER     01084025
               EVALUATION OF CONTENT AND APPLICATION OF UNDERSTANDING AND01084026
               APPLICATION OF UNDERSTANDING AND TEACHING OF CONCEPTS.    01084027
*FILE          LEARNING  MICRO-TEACHING  ANALYSIS OF TEACHING            01084  9
```

```
*OBJECTIVES    DEVELOP UNDERSTANDING AND GENERALIZATION OF LANGUAGE,     01085026
               CONCEPT, AND PRINCIPLES OF THE CONCEPT AND INTRODUCE THE  01085027
               IDEA OF MEDIATED BEHAVIOR.                                01085028
*PREREQUISITE  PREVIOUS MODULE ON THE TEACHING OF A CONCEPT              01085029
*EXPERIENCE    DISCUSSION OF THE RESULTS OF CONCEPT TEACHING MODULE.     01085011
               BASED UPON THE RESULTS OF CONCEPT TEACHING EXERCISE,      01085012
               DEVELOP DISCUSSION AROUND THE CAUSES OF SUCCESS OR FAILURE01085013
               IN THE TEACHING OF CONCEPTS AND THE DEGREE TO WHICH THE   01085014
               LEARNING OF THE CONCEPTS HAD ACTUALLY BEEN ASSESSED.      01085015
               DIRECT DISCUSSION TO THE SPECIFIC BEHAVIORS ENGAGED IN THE01085016
               TEACHING EXERCISE AND WHAT BEHAVIORALLY THEY HAD IN COMMON01085017
               AND DISCUSS THE ROLE SIMPLE LEARNING BEHAVIORS PLAYED IN  01085018
               THE LEARNING OF CONCEPTS.  AS DISCUSSION PROGRESSES BEGIN 01085019
               TO INTRODUCE THE TECHNICAL LANGUAGE, CONCEPT, AND         01085020
               PRINCIPLES OF A CONCEPT AND THEN GENERALIZE THIS OVER A   01085021
               VARIETY OF EXAMPLES AS PROVIDED BY THE CLASSROOM EXERCISE.01085022
               THIS MODULE SHOULD END WITH THE INTRODUCTION OF THE IDEA  01085023
               OF MEDIATED BEHAVIOR AND HOW THIS DIFFERENTIATES BETWEEN  01085024
               SIMPLER AND MORE COMPLEX FORMS OF LEARNING.               01085025
*SETTING       LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE         01085 10
*MATERIALS     BLANK                                                     01085  5
*LEVEL         ALL GRADES                                                01085  8
*GENERAL       ALL CANDIDATES                                            01085  7
*HOURS         1                                                         01085  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION AND LATER LEARNING TASK       01085030
               ANALYSIS EXERCISES.  ≥FOR PURE EVALUATION PURPOSES, HAVE  01085031
               STUDENTS REPEAT CONCEPT TEACHING EXERCISE AND TEST        01085032
               LEARNING RESULTS WHICH SHOULD SHOW SIG. LEARNING GAINS+   01085033
*FILE          LEARNING  TEACHING CONCEPTS  GENERALIZATION               01085  9
```

```
*OBJECTIVES    BEGIN THE UNDERSTANDING AND GENERALIZATION OF MEDIATED    01086024
               BEHAVIOR, THE ROLE IT PLAYS IN LEARNING, AND THE CONCEPT  01086025
               AS ITS BASIC UNIT.                                        01086026
*PREREQUISITE  PREVIOUS MODULES ON CONCEPT FORMATION                     01086027
*EXPERIENCE    DISCUSSION OF ADVANCED LEARNING AND EPISTEMOLOGY AS       01086011
               MEDIATED BEHAVIOR.  DISCUSSION SHOULD FOCUS ON THE NATURE 01086012
               OF CATEGORIZATION, SYSTEMATIZING, AND RATIONAL OPERATIONS 01086013
               AS THE OBJECT OF ADVANCED LEARNING AND THE FUNCTION OF    01086014
               SYMBOLS.  DISCUSSION EXAMPLES SHOULD BE DEVELOPED FROM THE01086015
               STUDENTS OWN LEARNING EXPERIENCES AND BEHAVIORAL          01086016
               ACTIVITIES.  PARTICULAR ATTENTION SHOULD BE PAID TO THE   01086017
               CONCEPT AS THE BASIC UNIT OF MEDIATED BEHAVIOR AND OF THE 01086018
               CONCEPT AS A FLEXIBLE ENTITY, THE STABILITY OF WHICH BEING01086019
               DEPENDENT UPON THE SYSTEM AND PURPOSE FOR WHICH IT WAS A  01086020
               PART.  DISCUSSION SHOULD LATER REFLECT UPON PREVIOUS      01086021
               TEACHING EXAMPLES OF PREVIOUS MODULE AND IDEAS IMPLICIT IN01086022
               STUDENT≤S EFFORTS TO TEACH A PARTICULAR CONCEPT.          01086023
*SETTING       LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE         01086 10
*MATERIALS     BLANK                                                     01086  5
*LEVEL         ALL GRADES                                                01086  8
*GENERAL       ALL CANDIDATES                                            01086  7
*HOURS         1-2                                                       01086  6
*EVALUATION    EVALUATE STUDENTS≤ ABILITY TO APPLY SOME ENTITY IN SEVERAL01086028
               DIFFERENT CONCEPTULAR FORMS FOR DIFFERENT PURPOSES.       01086029
               EVALUATION COULD BE BASED UPON SHORT WRITTEN EXERCISE OR  01086030
               CAREFULLY CONSTRUCTED SEQUENTIAL MULTIPLE-CHOICE          01086031
               EXAMINATION.  LATER EVALUATION SHOULD FOCUS ON ALTERNATE  01086032
               STRATEGIES USED IN ROLE-PLAYING TEACHING OF A CONCEPT.    01086033
*FILE          LEARNING  EPISTEMOLOGY  GENERALIZATION                    01086  9
```

```
*OBJECTIVES    DEVELOP UNDERSTANDING OF PRINCIPLE LEARNING AND PROBLEM   01087031
               SOLVING AS FACETS OF MEDIATED BEHAVIOR AND BEGIN THE      01087032
               PROCESS OF GENERALIZATION OF THIS CONTENT.                01087033
*PREREQUISITE PREVIOUS MODULES OF HIGHER LEARNING AND MEDIATED BEHAVIOR 01087034
*EXPERIENCE    CONTENT LECTURE ON PRINCIPLE LEARNING AND PROBLEM SOLVING.01087011
               BASED ON PREVIOUS DISCUSSION OF MEDIATED BEHAVIOR, THE    01087012
               NATURE, OPERATION, AND SEQUENTIAL ARRANGEMENT OF PRINCIPLE01087013
               LEARNING AND PROBLEM SOLVING SHOULD BE DEVELOPED.         01087014
               PRINCIPLE LEARNING SHOULD BE APPROACHED AS THE RULES BY   01087015
               WHICH CONCEPTS ARE MANIPULATED AND PROBLEM SOLVING SHOULD 01087016
               BE APPROACHED AS A SERIES OF STRATEGIES SUGGESTED BY      01087017
               CONCEPTS AND PRINCIPLES THROUGH WHICH THE LEARNER RESOLVES01087018
               CERTAIN QUESTIONS OR PROBLEMS.  EXAMPLES OF HOW THIS      01087019
               LEARNING IS ACHIEVED AND WHAT SPECIFICALLY THE LEARNING   01087020
               OPERATIONS INVOLVE SHOULD BE BASED FIRST UPON A QUITE     01087021
               COMPLEX SITUATION IN WHICH BOTH CONCEPTS AND PRINCIPLES   01087022
               ARE SUBJECT TO A NUMBER OF VARIATIONS AND INTERPRETATIONS,01087023
               AND THEN RETURNING TO SIMPLER EXAMPLES SUCH AS ELEMENTARY 01087024
               MATH, RULES OF SPELLING, ETC.  DISCUSSION SHOULD CONTINUE 01087025
               TO EMPHASIZE THAT MEDIATED LEARNING AND SUBJECT MATTER ARE01087026
               THE INVENTION OF THE INTELLECTUAL AND SOCIAL ORDER AND ARE01087027
               NOT ARBITRARY IN THE SENSE THAT SIMPLER LEARNED BEHAVIORS 01087028
               ARE, AND ARE SUBJECT TO MUCH WIDER TEACHING TECHNIQUES AND01087029
               INDIVIDUAL DIFFERENCES.                                   01087030
*SETTING       LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE         01087 10
*MATERIALS     BLANK                                                     01087  5
*LEVEL         ALL GRADES                                                01087  8
*GENERAL       ALL CANDIDATES                                            01087  7
*HOURS         1-2                                                       01087  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION ON CONTENT; LATER EVALUATION  01087035
               OF PROJECT INVOLVING THE DEVELOPMENT AND TEACHING         01087036
               EMPLOYMENT OF ALTERNATE STRATEGIES FOR A PARTICULAR AREA  01087037
               OF CONTENT.                                               01087038
*FILE          LEARNING  PROBLEM SOLVING  GENERALIZATION                 01087  9
```

```
*OBJECTIVES    DEMONSTRATE THE COMPLEXITY OF ADVANCED LEARNING, PROVIDE  01088030
               AN UNDERSTANDING OF THE NATURE OF INQUIRY BEHAVIOR AND    01088031
               PROBLEM-SOLVING, AND DEVELOP AN INTEREST IN THE NATURE OF 01088032
               CONVENTIONAL AND UNCONVENTIONAL THOUGHT AND HOW THIS      01088033
```

```
              CHANGES.                                                  01088034
*PREREQUISITE PREVIOUS SEQUENCES ON LEARNING                            01088035
*EXPERIENCE   DISCUSSION OF HIGHER LEVELS OF PROBLEM-SOLVING, INQUIRY   01088011
              BEHAVIOR AND LEARNING STRATEGIES.  DISCUSSION SHOULD BE   01088012
              DIRECTED INTO AN INTEGRATION OF FOUR DISTINCT AREAS: 1↑   01088013
              GETZEL≤S 2X2X2 MATRIX OF PROBLEMS WHICH CONFRONT LEARNER↓ 01088014
              2↑ BRUNER≤S NOTES ON INSTRUCTION AND THOUGHTS ON MAN AS A 01088015
              LEARNER↓ 3↑ THE DEWIAN INQUIRY MODEL AND LEARNING         01088016
              STRATEGIES↓ AND 4↑ CONVENTIONAL AND UNCONVENTIONAL THOUGHT01088017
              AND THE PROCESS OF CHANGE WITHIN A BODY OF KNOWLEDGE.     01088018
              SEQUENCE OF DISCUSSION SHOULD FOLLOW FOLLOWING APPROXIMATE01088019
              FORMAT: A↑ THE INTRODUCTION OF A PROBLEM FOR THE STUDENTS 01088020
              TO PLAY WITH FOR WHICH THERE IS NO KNOWN ANSWER FOLLOWED  01088021
              BY DISCUSSION OF HOW ONE WOULD GO ABOUT SOLVING THE       01088022
              PROBLEM↓ B↑ INTRODUCE THE GETZEL MATRIX OF PROBLEMS AND   01088023
              THE UNIQUE LEARNING SITUATIONS EMBODIED IN EACH USING     01088024
              PREVIOUS EXAMPLES AS APPLICATIONS↓ C↑ FOLLOW BY SHOWING   01088025
              THE DEWEY MODEL OF INQUIRY AS A STRATEGY EMPLOYED EARLIER 01088026
              TO ATTEMPT SOLUTION OF THE PROBLEM↓ AND D↑ FOLLOW BY A    01088027
              DISCUSSION OF BRUNER≤S MODEL AND THE NATURE OF            01088028
              CONVENTIONAL THOUGHT.                                     01088029
*SETTING      SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                      01088 10
*MATERIALS    ONE PROBLEM FOR WHICH THERE IS NO KNOWN SOLUTION ≥SUCH AS 01088  5
              WHAT TO DO ABOUT THE WIDENING GAP BETWEEN DEVELOPED AND   01088
              UNDERDEVELOPED NATIONS, OR CURING THE INSANE, ETC.↑       01088
*LEVEL        ALL GRADES                                                01088  8
*GENERAL      ALL CANDIDATES                                            01088  7
*HOURS        1-2                                                       01088  6
*EVALUATION   DEGREE OF STUDENT PARTICIPATION AND WRITTEN EXERCISE IN   01088036
              WHICH STUDENTS ARE REQUESTED TO DEVELOP A SPECIFIC        01088037
              QUESTION CONCERNING ADVANCED HUMAN LEARNING.              01088038
*FILE         LEARNING  GETZEL≤S MODEL  PROBLEM SOLVING                 01088  9
```

```
*OBJECTIVES   TO BEGIN TO DEVELOP INSIGHT INTO THE TERM [MOTIVATION[ AS 01089024
              NO MORE THAN AN HYPOTHETICAL CONSTRUCT, AND TO SEE THAT   01089025
              MOTIVATION IS SPECIFIC TO THE TASK INVOLVED, IN MUCH      01089026
              CLASSROOM ACTIVITY.  TO STRESS IMPORTANCE OF SUSTAINING   01089027
              ACTIVITY OVER TIME AS CRITICAL VARIABLE IN MOTIVATION.    01089028
*PREREQUISITE PREFERABLY DISCUSSION OF TYPES OF LEARNING THAT TAKE      01089029
              PLACE↓ BACKGROUND IN UNDERSTANDING OF NEED STRUCTURE.     01089030
*EXPERIENCE   DISCUSSION OF THE CONCEPT OF MOTIVATION.  DISCUSSION IS   01089011
              SPECIFICALLY RELATED TO CLASSROOM BEHAVIOR↓ ASSUMES       01089012
              PREREQUISITE KNOWLEDGE OF THE CONCEPT OF NEEDS, DRIVES.   01089013
              ATTENTION HERE IS FOCUSED ON ACTUAL CLASSROOM OBSERVABLE  01089014
              BEHAVIORS, IN TERMS OF ACTS.  DISCUSSION CENTERES ON HOW  01089015
              TEACHER MOTIVATES CLASS TO PARTICIPATE IN THE LEARNING    01089016
              EXPERIENCE AS REPRESENTED BY DAILY LESSONS.  STUDENTS     01089017
              SHOULD BE DEVELOPING CONCEPT OF MOTIVATION AS MORE THAN AN01089018
              [ATTENTION-GETTER[ OR [GIMMICK[ FOR BEGINNING A UNIT OR   01089019
              LESSON.  STUDENTS SHOULD MOVE TO A REALIZATION THAT TO    01089020
              MOTIVATE BEHAVIOR MEANS TO ACTUALLY CAUSE INITIATION OF   01089021
              ACTION, TO SHAPE OR DIRECT THIS ACTION, AND TO SUSTAIN IT 01089022
              OVER A PERIOD OF TIME.                                    01089023
*SETTING      BLANK  COLLEGE                                            01089 10
*MATERIALS    ALL STUDENTS RECEIVE DOSSIER ON TEACHER≤S ELEM. LESSON    01089  5
              PLAN AND UNIT PLAN IN AREA SUCH AS MATH, ENGLISH.  IN     01089
              SMALL GROUPS STUDENTS DEVELOP SUGGESTIONS FOR MOTIVATING  01089
              STUDENTS IN THE ACTIVITY.  THIS ACTIVITY BEGINS THE       01089
              MODULE↓ STUDENTS WILL CONCENTRATE ON GIMMICKS.            01089
*LEVEL        ALL GRADES                                                01089  8
```

```
*GENERAL        BLANK                                                     01089  7
*HOURS          1                                                         01089  6
*EVALUATION     A DOSSIER SIMILAR TO ONE ABOVE IN ANOTHER AREA.  STUDENTS 01089031
                DEVELOP PLANS FOR MOTIVATING THE CLASS, AND POINT OUT     01089032
                AREAS WHERE SPECIAL ATTENTION TO MOTIVATIONAL STRATEGIES  01089033
                WOULD BE MOST PERTINENT,                                  01089034
*FILE           MOTIVATION  INSTRUCTION  TECHNIQUES                       01089  9
```

```
*OBJECTIVES     TO HELP STUDENTS LOOK AT STUDENTS IN TERMS OF ACTUAL      01090026
                BEHAVIORS WHICH THEY, AS TEACHERS MIGHT MANIPULATE IN THE 01090027
                CLASSROOM TO ACHIEVE DESIRED STUDENT BEHAVIOR.  TO        01090028
                CONTINUE TO DEVELOP THE NOTION OF [MOTIVATION[ AS TOO     01090029
                GENERALIZED A TERM FOR ACTUAL USE IN CHANGING BEHAVIOR,   01090030
                AND TO HELP IN DEVELOPING MORE PRECISION IN ANALYZING THE 01090031
                FACTORS WHICH FORM THE MATRIX [MOTIVATION.[               01090032
*PREREQUISITE   PREVIOUS MODULE ON MOTIVATION                             01090033
*EXPERIENCE     CONTINUE DEVELOPMENT OF CONCEPT OF MOTIVATION IN TERMS OF 01090011
                PROBLEMS ARISING WITH LOW ACADEMICALLY MOTIVATED STUDENTS.01090012
                STUDENTS ARE POSED THE HYPOTHETICAL PROBLEM OF BEING      01090013
                PLACED IN A SAMPLE OF ELEMENTARY CLASSROOMS AND BEING PAID01090014
                FOR IDENTIFYING STUDENTS WHO WOULD BE CLASSED AS          01090015
                ACADEMICALLY LOW MOTIVATED.  DISCUSSION CENTERS ON MAKING 01090016
                [LOW MOTIVATED[ A USEFUL TERM IN ACTUAL BEHAVIORS.  THE   01090017
                IMPORTANCE OF CAREFUL OBSERVATION OF BEHAVIOR OVER TIME IS01090018
                STRESSED, AND STUDENTS ARE ENCOURAGED TO TALK IN TERMS OF 01090019
                ACTUAL BEHAVIORS RATHER THAN IN TERMS OF INTERVENING      01090020
                VARIABLES SUCH AS [NEEDS[.  STUDENTS ATTEMPT TO IDENTIFY  01090021
                TASK VARIABLES THAT SEPARATE THE LOW ACADEMICALLY         01090022
                MOTIVATED FROM THE MOTIVATED CLASS MEMBERS, SUCH AS LOW   01090023
                TASK INVOLVEMENT, IMMEDIATE GRATIFICATION, EASE OF        01090024
                COMPETITION,                                              01090025
*SETTING        BLANK  COLLEGE                                            01090 10
*MATERIALS      BLANK                                                     01090  5
*LEVEL          ALL GRADES                                                01090  8
*GENERAL        BLANK                                                     01090  7
*HOURS          1                                                         01090  6
*EVALUATION     STUDENTS VIEW TAPE OF BEHAVIOR JUDGED TO BE CHARACTERISTIC01090034
                OF LOW-MOTIVATED CHILDREN, AND TO SPECIFY BEHAVIORS WHICH 01090035
                SEPARATE THESE STUDENTS FROM THOSE CONSIDERED [MOTIVATED[.01090036
*FILE           MOTIVATION  LOW ACADEMIC STUDENTS                         01090  9
```

```
*OBJECTIVES     TO CONTINUE DIFFERENTIATION OF WHAT IS MEANT BY THE TERM  01091023
                [MOTIVATION[, IN TERMS OF SPECIFIC VARIABLES              01091024
*PREREQUISITE   PREVIOUS MODULES ON MOTIVATION                            01091025
*EXPERIENCE     CONTINUATION OF DISCUSSION OF THE ACADEMICALLY LOW        01091011
                MOTIVATED.  TAPE >VIDEO+ USED IN DEVELOPMENT OF TASK      01091012
                VARIABLES THAT ARE CHARACTERISTIC OF THE LOW MOTIVATED IS 01091013
                USED AND STUDENTS ARE ASKED TO INFER WHAT TYPES OF        01091014
                PERSONALITY VARIABLES SEEM TO ACCOMPANY THOSE CHILDREN    01091015
                JUDGED TO HAVE BEEN LOW MOTIVATED IN TERMS OF TASK        01091016
                VARIABLES,  STUDENTS SHOULD BE LED TO SEE THAT CERTAIN    01091017
                CHARACTERISTICS ARE COMMON TO MALES AND FEMALES, SUCH AS  01091018
                NEGATIVE SELF-CONCEPT, LOW ACADEMIC COMPULSIVITY ETC., BUT01091019
                THAT THEY DIFFER AS GROUPS IN TERMS OF OTHER VARIABLES    01091020
                SUCH AS LOW IMPULSE CONTROL, DEGREE OF FANTASYZING, AND SO01091021
                ON,                                                       01091022
*SETTING        BLANK  COLLEGE                                            01091 10
*MATERIALS      VIDEO TAPE OF CHILDREN DISPLAYING BEHAVIOR JUDGED         01091  5
                CHARACTERISTIC OF ACADEMICALLY LOW MOTIVATED              01091
```

```
*LEVEL        ALL GRADES                                                01091  8
*GENERAL      BLANK                                                     01091  7
*HOURS        1                                                         01091  6
*EVALUATION   SAME AS MODULE 1093                                       01091026
*FILE         MOTIVATION  VARIABLES  SELF CONCEPT                       01091  9

*OBJECTIVES   STUDENTS TRY TO ENGAGE IN ACTUAL BEHAVIORS ≥E.G. WRITING  01092028
              COMMENTS+ WHICH SHOULD LOGICALLY FOLLOW FROM ANALYSIS OF  01092029
              SPECIFIC BEHAVIORS.  AIM IS TO ENABLE STUDENTS TO ANALYZE 01092030
              BEHAVIORS, AND TO SORT ALTERNATIVE METHODS OF HANDLING THE01092031
              BEHAVIORS IN TERMS OF POSSIBLE CONSEQUENCES OF THEIR      01092032
              CHOICES.                                                  01092033
*PREREQUISITE PREVIOUS MODULES ON MOTIVATION                            01092034
*EXPERIENCE   DISCUSSION OF POSSIBLE METHODS OF HANDLING STUDENTS       01092011
              CONSIDERED LOW IN MOTIVATION FOR CLASSROOM ACTIVITIES.    01092012
              STUDENTS, IN SMALL GROUPS, ARE GIVEN COPIES OF WORK SHEETS01092013
              COMPLETED BY THE STUDENTS IN THE VIDEO TAPE USED IN       01092014
              PREVIOUS MODULES TO IDENTIFY LOW ACADEMICALLY MOTIVATED IN01092015
              TERMS OF TASK AND PERSONALITY VARIABLES.  PAPERS PERTAIN  01092016
              TO THE LOW MOTIVATED.  PAPERS HAVE BEEN GRADED BUT        01092017
              STUDENTS IN THE COURSE ARE TO DETERMINE WHAT IS WRITTEN ON01092018
              THE PAPER IN THE FORM OF COMMENTS, IF ANY.  GROUPS MEET AS01092019
              A CLASS FOR DISCUSSION OF COMMENTS.  RAISES QUESTION OF   01092020
              NEGATIVE COMMENTS USUALLY DIRECTED AT THE INDIVIDUAL ≥I.E.01092021
              YOU CAN DO BETTER+ VERSUS REWARD COMMENTS WHICH ARE       01092022
              USUALLY DIRECTED AT THE WORK ≥I.E. GOOD WORK+.  IMPORTANCE01092023
              OF REVERSE STRATEGY WITH LOW MOTIVATED IN TERMS OF        01092024
              PERSONALITY VARIABLE SUCH AS NEGATIVE SELF CONCEPT.  LEADS01092025
              TO DISCUSSION OF SUCH FACTORS AS TANGIBLE AND IMMEDIATE   01092026
              REWARD, ETC.                                              01092027
*SETTING      LARGE GROUP  COLLEGE                                      01092 10
*MATERIALS    CORRECTED PAPERS TO ACCOMPANY VIDEO FILM IN PREVIOUS      01092  5
              MODULES                                                   01092
*LEVEL        ALL GRADES                                                01092  8
*GENERAL      BLANK                                                     01092  7
*HOURS        2                                                         01092  6
*EVALUATION   SAME AS MODULE 1093                                       01092035
*FILE         MOTIVATION  BEAHVIOR                                      01092  9

*OBJECTIVES   TO JUXTAPOSE PREVIOUS LEARNING ON REINFORCEMENT PRINCIPLES01093032
              FROM DISCUSSION OF CONDITIONING WITH THOSE OF REWARD IN   01093033
              MOTIVATION THEORY, AND FOR STUDENTS TO LEARN HOW SPECIFIC 01093034
              BEHAVIORS CAN BE MANIPULATED BY POSITIVE AND NEGATIVE     01093035
              REINFORCEMENT IN TERMS OF MOTIVATIONAL PRINCIPLES.        01093036
*PREREQUISITE BACKGROUND IN REINFORCEMENT PRINCIPLES DEVELOPED IN       01093037
              DISCUSSION OF CONDITIONING THEORY.  PREVIOUS MODULES ON   01093038
              MOTIVATION                                                01093039
*EXPERIENCE   THE CONCEPTS OF REWARD OF LOW MOTIVATED STUDENTS FROM THE 01093011
              PREVIOUS MODULE ARE REVIEWED.  DISCUSSION THEN CENTERS ON 01093012
              THE PRINCIPLE OF WHY REWARDING BEHAVIOR IS USUALLY MORE   01093013
              PROFITABLE THAN PUNISHMENT.  THE CONCEPT IS DEVELOPED THAT01093014
              THE RESULTS OF PUNISHMENT ARE MORE VARIABLE THAN THE      01093015
              BEHAVIORS RESULTING FROM REWARD, IN TERMS OF PREDICTION OF01093016
              BEHAVIOR.  HYPOTHETICAL INSTANCES OF A CHILD≤S BEHAVIOR   01093017
              CAN BE USED AND STUDENTS DISCUSS THE TEACHER≤S ALTERNATIVE01093018
              MODES OF HANDLING THE BEHAVIOR, AND THEN POSIT THE CHILD≤S01093019
              NEXT BEHAVIORS.  THE PURPOSE IS TO CONTINUE TO EMPHASIZE  01093020
              THE IMPORTANCE OF TEACHERS TO CONSIDER THE CONSEQUENCES OF01093021
              THEIR ACTIONS WHEN DECIDING ON ALTERNATIVE STRATEGIES OF  01093022
```

```
                HANDLING BEHAVIOR, AND TO ESTIMATE PROBABILITY OF SUCCESS.01093023
                THE RELATIONSHIP OF SUCH CONCEPTS AS [REWARD[ AND         01093024
                [PUNISHMENT[ TO PRINCIPLES OF REINFORCEMENT THEORY ARE    01093025
                DEVELOPED, BASED ON THE POINTS RAISED IN THE PREVIOUS     01093026
                MODULE.  STUDENTS DEVELOP THE CONCEPT THAT MOTIVATION     01093027
                THEORY IF DISCUSSED IN MORE SPECIFIC TERMS SUCH AS        01093028
                PRINCIPLES OF REINFORCEMENT IF USEFUL IN ACTUAL           01093029
                MANIPULATION OF CLASSROOM BEHAVIOR.  CONTINUES CONCEPT OF 01093030
                MOTIVATION AS AN INTERVENING VARIABLE.                    01093031
*SETTING        LARGE GROUP  COLLEGE                                      01093 10
*MATERIALS      BLANK                                                     01093  5
*LEVEL          ALL GRADES                                                01093  8
*GENERAL        BLANK                                                     01093  7
*HOURS          1 1/2                                                     01093  6
*EVALUATION     STUDENTS VIEW VIDEO TAPES OF CLASSROOM BEHAVIOR AND MUST  01093040
                IDENTIFY REINFORCEMENT PRINCIPLES INVOLVED.  STUDENTS THEN01093041
                MAKE A DECISION ON HOW BEHAVIOR IS TO BE HANDLED AND      01093042
                CONSEQUENCES TO BE EXPECTED.  STUDENTS THEN VIEW HOW THE  01093043
                BEHAVIOR WAS IN FACT HANDLED BY THE TEACHER.              01093044
*FILE           MOTIVATION  CONDITIONING  REINFORCEMENT                   01093  9
```

```
*OBJECTIVES TO DEVELOP INCREASED PRECISION IN STUDENTS IN DRAWING         01094034
                INFERENCES FROM OBSERVED BEHAVIORS, AND TO MORE PRECISELY 01094035
                SPECIFY THE FACTORS INVOLVED IN UTILIZING THE TERM        01094036
                [MOTIVATION[.                                             01094037
*PREREQUISITE PREVIOUS MODULES ON MOTIVATION                              01094038
*EXPERIENCE     STUDENTS WATCH VIDEO TAPE OF STUDENT IN CONFERENCE WITH   01094011
                PARENTS AND TEACHER.  BEFORE CONFERENCE IS UNDERWAY OTHER 01094012
                THAN PRELIMINARIES, STUDENTS RECEIVE DATA SHEET ON STUDENT01094013
                CONTAINING INFO ON INTELLIGENCE SCORES ≥HIGH+,            01094014
                MIDDLE-CLASS BACKGROUND, BUSINESS-MAN FATHER, PARENTS     01094015
                STRESS ON IMPORTANCE OF EDUCATION, ETC.  STUDENTS ARE     01094016
                GIVEN COPIES OF HIS WORKSHEETS, GRADED, AND ASKED ONCE    01094017
                AGAIN TO COMMENT ON HIS PAPER PRIOR TO RETURNING THE WORK.01094018
                THE VIDEO THEN CONTINUES.  THE TAPE IS USED TO CONTINUE TO01094019
                DEVELOP THE PRINCIPLE THAT [MOTIVATION[ AS A TERM IS      01094020
                USEFUL ONLY IN ESTABLISHMENT OF A FRAME OF REFERENCE, AND 01094021
                MUST BE MORE PRECISELY DELINEATED.  THE CONVERSATION      01094022
                BETWEEN THE GROUP SUGGESTS THAT THIS YOUNG MAN IS         01094023
                CONSTANTLY REINFORCED BY PARENTS AND TEACHERS WITH THE    01094024
                REMARK THAT THEY KNOW HE CAN DO IT IF HE ONLY TRIES.      01094025
                STUDENTS SHOULD COME TO REALIZE THAT THE TECHNIQUES OF    01094026
                REINFORCEMENT DEVELOPED IN THE PREVIOUS TWO MODULES TO    01094027
                DEAL WITH LOW MOTIVATED STUDENTS ARE NOT NECESSARILY      01094028
                APPLICABLE TO MIDDLE-CLASS UNDERACHIEVERS.  STUDENTS      01094029
                REEVALUATE THEIR REMARKS ON THE STUDENT PAPERS.           01094030
                DISCUSSION MOVES TO CONCEPT OF ACHIEVEMENT MOTIVATION IN  01094031
                MIDDLE-CLASS HOMES WHERE ACHIEVEMENT IS CONSIDERED        01094032
                IMPORTANT.                                                01094033
*SETTING        LARGE GROUP  COLLEGE                                      01094 10
*MATERIALS      VIDEO TAPE OF PARENT-CHILD-TEACHER CONFERENCE.  DOSSIER ON01094  5
                STUDENT AND STUDENT PAPERS                                01094
*LEVEL          ALL GRADES                                                01094  8
*GENERAL        BLANK                                                     01094  7
*HOURS          2                                                         01094  6
*EVALUATION     MODULE 1103                                               01094039
*FILE           MOTIVATION  INFERENCES  PERCEPTION                        01094  9
```

```
*OBJECTIVES     AID STUDENTS IN SPECIFYING WHAT TYPES OF VARIABLES MAY IN 01095025
                FACT BE REINFORCING TO MIDDLE-CLASS ACHIEVERS.  TO DEVELOP01095026
                CONCEPT OF IMPORTANCE OF PARENTAL VALUE SYSTEM IN SHAPING 01095027
                OF SCHOOL POLICY.  CONTINUE STRESS ON INCREASINGLY COMPLEX01095028
                BEHAVIOR DEMANDED WITHIN CULTURAL SETTING.                01095029
*PREREQUISITE PREVIOUS MODULES ON MOTIVATION                              01095030
*EXPERIENCE     THE CONCEPT TO BE DEVELOPED IS THAT OF ACHIEVEMENT        01095011
                MOTIVATION AS REFLECTED IN AMERICAN SOCIETY AND           01095012
                EXEMPLIFIED BY THE TEACHER AND HER STUDENTS IN THE        01095013
                CLASSROOM.  SEVERAL OF MCCLELLAND≤S SIMPLE TESTS NOT USED 01095014
                IN THE FILM OF HIS EXPERIMENTS ARE PRESENTED TO START THE 01095015
                DISCUSSION.  STUDENTS ENGAGE IN SHORT TASKS SUCH AS THE   01095016
                PICKING OF TARTANS, THE CHOOSING OF WORD PHRASES.         01095017
                STUDENTS, IN SMALL GROUPS, ARE ASKED TO HYPOTHESIZE THE   01095018
                THEORETICAL ASSUMPTIONS UNDERLYING THE USE OF THESE       01095019
                DEVICES, AND THE RESULTS EXPECTED.  DISCUSSION THEN       01095020
                CENTERS ON THE PHILOSOPHIC ASSUMPTIONS OF THE ACHIEVING   01095021
                SOCIETY AND ITS CORRELATION WITH THE ECONOMIC RISE OF A   01095022
                CULTURE.  DISCUSSION USES THE AMERICAN SOCIETY AS AN      01095023
                EXEMPLAR IN TERMS OF THE AFFLUENT SOCIETY.                01095024
*SETTING        LARGE GROUP  COLLEGE                                      01095 10
*MATERIALS      EXAMPLES OF TESTS USED IN MCCLELLAND≤S EXPERIMENTS        01095  5
*LEVEL          ALL GRADES                                                01095  8
*GENERAL        BLANK                                                     01095  7
*HOURS          1                                                         01095  6
*EVALUATION     SAME AS MODULE 1103                                       01095031
*FILE           MCCLELLAND EXPERIEMENTS  MOTIVATION  CLASSROOM INTERACTION01095  9
```

```
*OBJECTIVES     STUDENTS CONTINUE ANALYSIS OF BEHAVIORS IN TERMS OF TASK  01096022
                AND PERSONALITY VARIABLES.  THIS TIME ANALYSIS            01096023
                CONCENTRATES ON BEHAVIORS OCCURING IN INTERACTION BETWEEN 01096024
                FATHERS AND SONS IN SPECIFIED SITUATIONS.                 01096025
*PREREQUISITE PREVIOUS MODULES ON LEARNING THEORY                         01096026
*EXPERIENCE     THE CONCEPT OF ACHIEVEMENT MOTIVATION IS DEVELOPED THROUGH01096011
                USE OF A FILM SUCH AS NEED TO ACHIEVE.  DISCUSSION CENTERS01096012
                ON MORE OBVIOUS VARIABLES SUCH AS INCONSISTENT RESPONSE   01096013
                PATTERNS OF FEMALES+ THE ROLE OF PARENTS AS REFLECTED IN  01096014
                THE FILM+ THE INTERACTIONS OF THE FATHERS WITH THEIR SONS 01096015
                ARE ANALYZED IN TERMS OF THE VERBAL RESPONSES MADE.       01096016
                POSSIBLE PERSONALITY CHARACTERISTICS OF THE FATHERS ARE   01096017
                SUGGESTED.  STUDENTS ARE THEN ASKED TO HYPOTHESIZE THE    01096018
                TYPES OF TASK AND PERSONALITY VARIABLES THAT ARE BELIEVED 01096019
                TO BE REFLECTED IN MOTHERS OF MALES HIGH IN ACHIEVEMENT   01096020
                MOTIVE.  ≥THE MOTHERS ARE NOT SHOWN IN THE FILM.+         01096021
*SETTING        LARGE GROUP  COLLEGE                                      01096 10
*MATERIALS      FILM NEED TO ACHIEVE                                      01096  5
*LEVEL          ALL GRADES                                                01096  8
*GENERAL        BLANK                                                     01096  7
*HOURS          1                                                         01096  6
*EVALUATION     SAME AS MODULE 1103                                       01096027
*FILE           MOTIVATION  ACHIEVEMENT  PERSONALITY                      01096  9
```

```
*OBJECTIVES     TO DEVELOP UNDERSTANDING OF THE ROLE OF DEVELOPMENT IN    01097021
                BUILDING MOTIVATION IN CHILDREN                           01097022
*PREREQUISITE PREVIOUS MODULES IN MOTIVATION.                             01097023
*EXPERIENCE     STUDENTS, IN SMALL GROUPS, ARRIVE AT TASK AND PERSONALITY 01097011
                VARIABLES THAT THEY FEEL ARE REFLECTED IN MOTHERS OF BOYS 01097012
                HIGH IN ACHIEVEMENT MOTIVATION AS EXEMPLIFIED BY          01097013
                MCCLELLAND≤S THEORY, AND THOSE REFLECTED IN MOTHERS OF LOW01097014
                ACHIEVEMENT MOTIVATED SONS.  INSTRUCTOR PROVIDES DIRECTION01097015
                HIGHLIGHTING THOSE VARIABLES FOUND TO BE SIGNIFICANT IN   01097016
                MCCLELLAND≤S THEORIZING.  DISCUSSION MOVES TO ROLE OF SUCH01097017
                FACTORS IN DEVELOPING HIGHER ORDER THOUGHT PROCESSES AS   01097018
                REFLECTED BY PIAGET AND GAGNE AND BRUNER IN TERMS OF      01097019
                PROBLEM SOLVING.                                          01097020
*SETTING        LARGE GROUP  COLLEGE                                      01097 10
*MATERIALS      READINGS IN CHILD DEVELOPMENT ON INDEPENDENCE AND         01097  5
                DEPENDENCE TRAINING                                       01097
*LEVEL          ALL GRADES                                                01097  8
*GENERAL        ALL CANDIDATES                                            01097  7
*HOURS          1                                                         01097  6
*EVALUATION     SAME AS MODULE 1103                                       01097024
*FILE           MOTIVATION  MCCLELLAND  ACHIEVEMENT                       01097  9
```

```
*OBJECTIVES     TO DEVELOP A SET IN STUDENTS FOR FOLLOWING MODULES DEALING01098020
                WITH SPECIFIC ASPECTS OF ACHIEVEMENT MOTIVATION.          01098021
                CONTINUED PRACTICE IN ANALYSIS OF SITUATIONS IN TERMS OF  01098022
                SPECIFIC BEHAVIORAL ACTS AND DISCUSSED IN BEHAVIORAL      01098023
                TERMS.                                                    01098024
*PREREQUISITE PREVIOUS MODULES IN MOTIVATION                              01098025
*EXPERIENCE     OPEN DISCUSSION OF FILM NEED TO ACHIEVE.  STUDENTS ARE    01098011
                ASKED TO REVIEW THE TASKS REQUIRED IN EACH SEGMENT OF THE 01098012
                FILM, AND THE PRINCIPLES OF REINFORCEMENT UTILIZED IN     01098013
                MANIPULATION OF BEHAVIOR IN EACH INSTANCE.  STUDENTS      01098014
                SHOULD DEVELOP AN UNDERSTANDING OF EACH FILM SEGMENT AS A 01098015
                REFLECTION OF MOTIVATION BUT THAT EACH SEGMENT HAS UNIQUE 01098016
                CHARACTERISTICS NOT STRESSED IN THE OTHER SEGMENTS.       01098017
                STUDENTS ARE REINFORCED IN BEHAVIORS OF ANALYSIS OF       01098018
                SITUATIONS AS SERIES OF SPECIFIC ACTS.                    01098019
*SETTING        LARGE GROUP  COLLEGE                                      01098 10
*MATERIALS      BLANK                                                     01098  5
*LEVEL          ALL GRADES                                                01098  8
*GENERAL        ALL CANDIDATES                                            01098  7
*HOURS          1                                                         01098  6
*EVALUATION     SAME AS MODUEL ≥1103↑                                     01098026
*FILE           MOTIVATION  REINFORCEMENT  ACHIEVEMENT                    01098  9
```

```
*PREREQUISITE PREVIOUS MODULES ON MOTIVATION                              01099026
*EXPERIENCE     AN EXPERIMENT TO BE DONE WITH PARTICIPATION OF STUDENTS IN01099011
                THE CLASS IS DEVISED.  A TASK INVOLVING RISK TAKING IS    01099012
                UTILIZED.  STUDENTS SPECIFY INDIVIDUALLY PRIOR TO         01099013
                PARTICIPATION WHAT THEY BELIEVE TO BE THEIR PROBABILITY OF01099014
                SUCCESS, AND TO SPECIFY HOW CERTAIN THEY ARE OF THEIR     01099015
                ESTIMATE.  FOLLOWING COMPLETION OF THE TASK, FEEDBACK IS  01099016
                GIVEN IN SOME FORM TO CREATE DISSONANCE BASED ON PREVIOUS 01099017
                ESTIMATES.  STUDENTS ARE ASKED TO REEVALUATE AND TO       01099018
                SPECIFY IN BEHAVIORAL TERMS WHY THEY ARE NOW STATING THEIR01099019
                CASE IN THESE TERMS.  STUDENTS MEET IN SMALL GROUPS TO    01099020
                DISCUSS THE VARIOUS STEPS IN THEIR BEHAVIORS IN TERMS OF  01099021
                THE TASK AND PERSONALITY VARIABLES.  OF THE THREE         01099022
                INTERLOCKING FACTORS INVOLVED IN EACH STEP OF AWARENESS   01099023
                THE EXPERIMENT IS DEVELOPED, AND THE MOTIVATIONAL         01099024
                COMPONENTS FROM PREVIOUS MODULES ARE UTILIZED IN ANALYSIS.01099025
*SETTING        LARGE GROUP  COLLEGE                                      01099 10
*MATERIALS      A THREE-STEP EXPERIMENT INVOLVING ACTIVE STUDENT          01099  5
                PARTICIPATION, INVO_VING RISK-TAKING, LEVEL OF ASPIRATION,01099
                COGNITIVE DISSONANCE.                                     01099
*LEVEL          ALL GRADES                                                01099  8
*GENERAL        ALL CANDIDATES                                            01099  7
```

```
*HOURS          1                                                     01099  6
*EVALUATION     SAME AS MODULE 1103                                   01099027
*FILE           MOTIVATION  RISK TAKING  COGNITIVE DISSONANCE         01099  9

*OBJECTIVES     TO DEVELOP THE CONCEPT OF LEVEL OF ASPIRATION IN      01100022
                BEHAVIORAL TERMS.                                     01100023
*PREREQUISITE   PREVIOUS MODULES ON MOTIVATION                        01100024
*EXPERIENCE     RESHOWING OF FILM CLIP FROM NEED TO ACHIEVE DEALING   01100011
                PARTICULARLY WITH ESTABLISHMENT OF LEVEL OF ASPIRATION.  01100012
                DISCUSSION OF HOW LEVEL OF ASPIRATION IS DETERMINED FOR AN01100013
                INDIVIDUAL<S PERFORMANCE.  STRESS IMPORTANCE OF       01100014
                CONSIDERATION NOT ONLY OF NEED TO SUCEED BUT NEED TO AVOID01100015
                FAILURE, PLUS THE DIFFICULTY OF THE TASK, AND THE     01100016
                INDIVIDUAL<S EXPECTANCY OF SUCCESS.  DISCUSSION OF HOW   01100017
                COLLEGE STUDENTS RESET LEVELS OF ASPIRATION IN EXPERIMENT 01100018
                IN PREVIOUS MODULE, AND GENERALIZE TO HOW STUDENTS RESET  01100019
                LEVEL OF ASPIRATION IN COURSES.  DISCUSSION OF HOW    01100020
                TEACHERS UTILIZE THIS IN ACTUAL CLASSROOM SITUATIONS.  01100021
*SETTING        LARGE GROUP  COLLEGE                                  01100 10
*MATERIALS      FILM CLIP                                             01100  5
*LEVEL          ALL GRADES                                            01100  8
*GENERAL        ALL CANDIDATES                                        01100  7
*HOURS          1                                                     01100  6
*EVALUATION     SAME AS 1103                                          01100025
*FILE           MOTIVATION ASPIRATION LEVEL  PERFORMANCE              01100009

*OBJECTIVES     TO DEVELOP IN BEHAVIORAL TERMS THE CONCEPT OF RISK-TAKING 01101020
                AND TO ILLUSTRATE ITS JUXTAPOSITION WITH LEVEL OF     01101021
                ASPIRATION THEORY.  TO DEVELOP CONTINUING UNDERSTANDING OF01101022
                HOW MOTIVATION PER SE IS USEFUL ONLY AS AN INTERVENING   01101023
                VARIABLE, AND MUST BE MORE PRECISELY DEFINED IN TERMS OF  01101024
                ELEMENTS USEFUL IN THE CLASSROOM.                     01101025
*PREREQUISITE   PREVIOUS MODULES IN MOTIVATION                        01101026
*EXPERIENCE     RESHOWING FILM CLIP FROM NEED TO ACHIEVE DEALING WITH 01101011
                RISK-TAKING.  DISCUSSION OF PERSONALITY VARIABLES INVOLVED01101012
                IN DEVELOPMENT OF RISK-TAKING.  DISCUSSION SHOULD CENTER  01101013
                ON ACTUAL CLASSROOM SITUATIONS IN WHICH STUDENTS ARE  01101014
                CONSTANTLY FORCED UNCONSCIOUSLY TO ENGAGE IN RISK-TAKING. 01101015
                SUCH AS ASSIGNMENTS INVOLVING SCORES IN TERMS OF GUESSING,01101016
                OR WHERE ANSWERS ARE EITHER RIGHT OR WRONG, AND THE DEMAND01101017
                OF TEACHERS IN MANY INSTANCES FOR EMPHASIS ON PERFECT 01101018
                PAPERS, ETC.                                          01101019
*SETTING        LARGE GROUP  COLLEGE                                  01101 10
*MATERIALS      FILM CLIP                                             01101  5
*LEVEL          ALL GRADES                                            01101  8
*GENERAL        ALL CANDIDATES                                        01101  7
*HOURS          1                                                     01101  6
*EVALUATION     SAME AS 1103                                          01101027
*FILE           MOTIVATION  RISK TAKING  LEVEL OF ASPIRATION          01101  9

*OBJECTIVES     TO DEVELOP IN BEHAVIORAL TERMS THE CONCEPT OF COGNITIVE   01102023
                DISSONANCE AND ITS RELATIONSHIP IN MOTIVATION THEORY. 01102024
*PREREQUISITE   PREVIOUS MODULES IN MOTIVATION                        01102025
*EXPERIENCE     RESHOW FILM CLIP FROM NEED TO ACHIEVE EMPHASIZING     01102011
                COGNITIVE DISSONANCE.  DISCUSSION SHOULD CENTER ON    01102012
                STUDENT<S OWN EXPERIENCES WHEN INCORRECT JUDGMENTS HAVE   01102013
                BEEN MADE ON GRADES RECEIVED AT THE END OF A COURSE, AND  01102014
                THE PROCESSES USED TO DEAL WITH THE DISSONANCE.  THE  01102015
```

```
               ACTUAL PROCESSES IN TERMS OF BEHAVIORS INVOLVED IN        01102016
               COGNITIVE DISSONANCE ARE OUTLINED.  ITS IMPLICATIONS IN   01102017
               TERMS OF FIRMLY HELD VALUES IS DISCUSSED, AND STUDENTS    01102018
               SHOULD BE AIDED IN CAREFUL ANALYSIS OF BEHAVIORS TO BE    01102019
               FOUND IN VACILLATING INDIVIDUALS.  COGNITIVE DISSONANCE IS01102020
               INTEGRATED WITH THE MODULES ON LEVEL OF ASPIRATION AND    01102021
               RISK-TAKING.                                              01102022
*SETTING       LARGE GROUP  COLLEGE                                      01102 10
*MATERIALS     FILM CLIP                                                 01102  5
*LEVEL         ALL GRADES                                                01102  8
*GENERAL       ALL CANDIDATES                                            01102  7
*HOURS         1                                                         01102  6
*EVALUATION    SAME AS 1103                                              01102026
*FILE          MOTIVATION  COGNITIVE DISSONANCE                          01102  9

*OBJECTIVES    TO EVALUATE STUDENT UNDERSTANDING OF CONCEPTS DEVELOPED IN01103019
               THE UNIT ON MOTIVATION, IN TERMS OF ABILITY TO INTEGRATE  01103020
               CONCEPTS IN TERMS OF A SET OF VARIABLES.                  01103021
*PREREQUISITE  PREVIOUS MODULES ON MOTIVATION                            01103022
*EXPERIENCE    REVIEW OF PRINCIPLE POINTS DEVELOPED IN PRECEDING MODULES 01103011
               ON MOTIVATION -- MOTIVATION AS A PROCESS OF INITIATION,   01103012
               DIRECTION AND SUSTAINING OF BEHAVIOR+ THE IMPORTANCE OF   01103013
               SPECIFYING MOTIVATION IN MORE DELINEATED TERMS OF CERTAIN 01103014
               AREAS+ TASK AND PERSONALITY VARIABLES+ HOME VARIABLES+    01103015
               ACHIEVEMENT MOTIVATION AS REFLECTION OF SOCIETY+ SPECIFIC 01103016
               COMPONENTS OF MOTIVATION SUCH AS LEVEL OF ASPIRATION,     01103017
               RISK-TAKING, COGNITIVE DISSONANCE.                        01103018
*SETTING       INDEPENDENT  COLLEGE                                      01103 10
*MATERIALS     BLANK                                                     01103  5
*LEVEL         ALL GRADES                                                01103  8
*GENERAL       ALL CANDIDATES                                            01103  7
*HOURS         1                                                         01103  6
*EVALUATION    STUDENTS ARE PROVIDED WITH A CASE STUDY OF AN ELEMENTARY  01103023
               STUDENT, MALE, UNDERACHIEVER IN TERMS OF ACADEMIC         01103024
               MOTIVATION IN THE CLASSROOM.  THE STUDENTS DILEMMA        01103025
               EMBODIES THE ASPECTS OUTLINED ABOVE.  STUDENTS ARE ASKED  01103026
               TO ANALYZE THE DATA PROVIDED, DISCUSS THE CONSEQUENCES AND01103027
               ALTERNATIVES SUGGESTED BY THE DATA.  ATTENTION IS ALSO    01103028
               FOCUSED ON STUDENTS CAREFUL ANALYSIS OF BEHAVIORS RATHER  01103029
               THAN INFERENCES, AND ON STUDENT UNDERSTANDING THAT THEIR  01103030
               RECOMMENDATIONS IN TERMS OF WHAT THEY COULD DO TO ALTER   01103031
               THE SITUATION ≥IN THEIR ROLE OF CLASSROOM TEACHER+ WITHIN 01103032
               THE CLASSROOM ITSELF MUST DEAL ONLY WITH VARIABLES UNDER  01103033
               THEIR IMMEDIATE MANIPULATION, IN THE FINAL ANALYSIS.      01103034
               PAPER ABOUT 10 PAGES.                                     01103035
*FILE          MOTIVATION  BEHAVIOR  VARIABLES INTERACTION               01103  9

*OBJECTIVES    INTRODUCTION TO THE CONCEPT OF CREATIVITY.  STUDENTS ARE  01104027
               FORCED TO DISCUSS CREATIVITY IN TERMS OF SPECIFIC TASK AND01104028
               PERSONALITY VARIABLES RATHER THAN AS A GENERALIZED TERM.  01104029
*PREREQUISITE  PREVIOUS MODULES ON THE NATURE OF INTELLIGENCE+ MODULES ON01104030
               ON LEARNING THEORY IN TERMS OF ASSOCIATION LEARNING.      01104031
               PROBLEM SOLVING+ PREVIOUS MODULES ON MOTIVATION           01104032
*EXPERIENCE    STUDENTS IN SMALL GROUPS ARE ASKED TO CONSIDER A          01104011
               HYPOTHETICAL ELEMENTARY CLASSROOM IN WHICH THEY ARE       01104012
               TEACHING.  THEY ARE ASKED BY AN INTERVIEWER TO POINT OUT  01104013
               THE STUDENT WHO THEY JUDGE TO BE MOST CREATIVE IN THE     01104014
               CLASSROOM.  THE STUDENTS CREATE A PROFILE OF              01104015
               CHARACTERISTICS THEY WOULD EXPECT TO FIND IN THE STUDENT. 01104016
```

```
                STUDENTS ARE ENCOURAGED TO CREATE A PROFILE BASED ON      01104017
                INFERENCES DRAWN FROM ACTUAL BEHAVIORS THAT MIGHT BE      01104018
                EXHIBITED BY A CHILD HIGH IN CREATIVITY.  ATTENTION IS    01104019
                DIRECTED TO STATING CHARACTERISTICS IN TERMS OF ACTUAL    01104020
                TASK VARIABLES THEY MIGHT EXPECT, AND PERSONALITY         01104021
                VARIABLES THAT MIGHT BE INFERRED FROM THE TASK ANALYSIS.  01104022
                THIS IS DONE TO DRAW STUDENTS AWAY FROM THE TENDENCY TO   01104023
                OVERGENERALIZE CREATIVITY IN STEREOTOPIC FORMS OF THE     01104024
                ARTIST, WRITER, ETC., AND AS A TRAIT POSSESSED IN ALL OR  01104025
                NOTHING QUANTITIES.                                       01104026
*SETTING        LARGE GROUP  COLLEGE                                      01104 10
*MATERIALS      BLANK                                                     01104  5
*LEVEL          ALL GRADES                                                01104  8
*GENERAL        ALL CANDIDATES                                            01104  7
*HOURS          1                                                         01104  6
*EVALUATION     SAME AS 1106                                              01104033
*FILE           CREATIVITY  PERSONALITY  CORRELATES                       01104  9
```

```
*OBJECTIVES     TO DEVELOP AN UNDERSTANDING OF THE POSSIBILITY OF A FACTOR01105028
                LABELED [CREATIVITY[ WHICH STANDS SEPARATE FROM THE       01105029
                TRADIONAL CONCEPT OF INTELLIGENCE, IN TERMS OF SPECIFIC   01105030
                TYPES OF BEHAVIORS.                                       01105031
*PREREQUISITE PREVIOUS MODULE ON CREATIVITY                               01105032
*EXPERIENCE     DISCUSSION OF WHETHER THERE IS AN ASPECT OF COGNITIVE     01105011
                FUNCTIONING WHICH CAN BE LABELED [CREATIVITY[, WHICH      01105012
                STANDS APART FROM THE TRADITIONAL CONCEPT OF GENERAL      01105013
                INTELLIGENCE.  STUDENTS REVIEW ASPECTS OF VARIOUS GROUP   01105014
                AND INDIVIDUAL INTELLIGENCE TESTS TO WHICH THEY WERE      01105015
                EXPOSED IN PREVIOUS MODULES.  INTRODUCTION OF TESTS IN    01105016
                SPECIFIC AREAS SUCH AS ART+ SUTDENTS ARE ASKED TO         01105017
                DIFFERENTIATE THE PROBLEMS INHERENT IN DISCUSSING         01105018
                CREATIVITY AND INTELLIGENCE AS SEPARATE ENTITIES.         01105019
                DISCUSSION OF THE IDEA THAT INSTRUMENTS SUPPOSEDLY        01105020
                MEASURING CREATIVITY ARE NO MORE STRONGLY RELATED TO ONE  01105021
                ANOTHER THAN THEY ARE RELATED TO GENERAL INTELLIGENCE.    01105022
                ≥SEE GETZELS, JACKSON+.  DISCUSSION OF VIEWING            01105023
                INTELLIGENCE ON A CONTINUUM, BUT VIEWING CREATIVITY AS A  01105024
                DICHOTOMY.  STUDENTS ARE ASKED TO DISTINGUISH THE         01105025
                SIMILARITIES AND DIFFERENCES BETWEEN THE CONCEPT OF       01105026
                [INTELLIGENCE+ AND THE CONCEPT OF [CREATIVITY.[           01105027
*SETTING        LARGE GROUP  COLLEGE                                      01105 10
*MATERIALS      ELEMENTARY STANDARDIZED TESTS OF CREATIVITY READINGS IN   01105  5
                GETZELS AND JACKSON ON CREATIVITY                         01105
*LEVEL          ALL GRADES                                                01105  8
*GENERAL        ALL CANDIDATES                                            01105  7
*HOURS          1                                                         01105  6
*EVALUATION     SAME AS 1106                                              01105033
*FILE           CREATIVITY  GETZEL + JACKSON  COGNITION                   01105  9
```

```
*OBJECTIVES     INTEGRATION OF CREATIVITY WITH THE DEVELOPMENTAL SEQUENCE 01106023
                OF MODULES WHICH STRESSED THE IMPORTANCE OF EARLY         01106024
                DEVELOPMENT IN TERMS OF BLOOM<S NEGATIVELY ACCELERATING   01106025
                GROWTH CURVE.  DEVELOPMENT OF UNDERSTANDING OF            01106026
                CREATIVITY≤S ROLE IN THE HUMAN≤S PROCESS OF INCREASING    01106027
                DIFFERENTIATION INTO MORE COMPLEX BEHAVIOR, AS WITH       01106028
                INTELLIGENCE IN REGARD TO LEARNING.                       01106029
*PREREQUISITE PREVIOUS MODULES IN CREATIVITY                              01106030
*EXPERIENCE     DISCUSSION OF THE WALLACH FINDINGS ON THE INTERACTION OF  01106011
                THE TWO VARIABLES INTELLIGENCE AND CREATIVITY CONTINUES   01106012
```

```
               THE DISCUSSION FROM THE PREVIOUS MODULE ON THESE TWO          01106013
               VARIABLES.  REINTRODUCTION OF THE CONCEPT OF THE CRITICAL     01106014
               PERIODS HYPOTHESIS DISCUSSED IN THE AREA OF CHILD             01106015
               DEVELOPMENT.  DISCUSSION OF THE NEGATIVELY ACCELERATING       01106016
               GROWTH CURVE, AND ITS IMPLICATION FOR CREATIVITY              01106017
               DEVELOPMENT.  DEVELOPMENT AS A PROCESS OF DIFFERENTIATION     01106018
               INTO INCREASINGLY COMPLEX FORMS COGNITIVELY AND SOCIALLY      01106019
               IS REITERATED.  THE ASSUMPTION OF A DECREASE IN THE           01106020
               DIFFERENTIATION BETWEEN INTELLIGENCE AND CREATIVITY WITH      01106021
               DECREASING AGE AND GRADE LEVEL IS POSITED.                    01106022
*SETTING       LARGE GROUP  COLLEGE                                          01106 10
*MATERIALS     READINGS IN WALLACH AND KOGAN, MODES OF THINKING IN YOUNG     01106  5
               CHILDREN                                                      01106
*LEVEL         ALL GRADES                                                    01106  8
*GENERAL       ALL CANDIDATES                                                01106  7
*HOURS         1                                                             01106  6
*EVALUATION    A SHORT PAPER ON THE ASSUMPTIONS UNDERLYING                   01106031
               [TASK-ORIENTED PLAY[ VERSUS FREE PLAY IN PRESCHOOL AND        01106032
               KINDERGARDEN ACTIVITIES.                                      01106033
*FILE          CREATIVITY  WALLACH  INTELLIGENCE                             01106  9
```

```
*OBJECTIVES    TO DEVELOP AN UNDERSTANDING OF THE PROCESSES IN TERMS OF      01107025
               COGNITIVE OPERATIONS INVOLVED IN [THINKING CREATIVELY[.       01107026
               TO INCREASE STUDENT DIFFERENTIATION BETWEEN CONVERGENT        01107027
               ASSOCIATION AND DIVERGENT ASSOCIATION.                        01107028
*PREREQUISITE  PREVIOUS MODULES IN CREATIVITY, LEARNING, ETC. AS OUTLINE     01107029
               IN MODULE ONE OF THIS SERIES.                                 01107030
*EXPERIENCE    INTURDUCTION TO THE PROCESSES INVOLVED IN CREATIVE            01107011
               THOUGHT,  USE OF SEVERAL EXAMPLES SIMILAR TO THOSE FOUND      01107012
               ON THE REMOTE ASSOCIATE TEST.  ≥FOR EXAMPLE:  WHEEL           01107013
               ELECTRIC  HIGH  + - - CHAIR+ STUDENTS ARE PRESENTED           01107014
               EXAMPLES WITHOUT SOLUTION, AND [PLAY[ AT FINDING THE          01107015
               ANSWERS.  CONCENTRATION IN DISCUSSION ABOUT THE ACTUAL        01107016
               BEHAVIORS APPEARING IN THE PROCESS OF SOLUTION--- E.G.        01107017
               FIRST RESPONSES DOMINANT, USE OF ASSOCIATIONS.                01107018
               REINTRODUCTION OF TYPES OF LEARNING IN THE GAGNE MODEL.       01107019
               WITH ATTENTION TO THE ROLE OF ASSOCIATION LEARNING.           01107020
               DISTINCTION DEVELOPED BETWEEN TYPE OF ASSOCIATION             01107021
               LEARNING TAKING PLACE IN MOST CLASSROOMS ≥CONVERGENT+ AND     01107022
               THE REMOTE ASSOCIATION LEARNING INVOLVED IN DIVERGENT         01107023
               THINKING.                                                     01107024
*SETTING       LARGE GROUP  COLLEGE                                          01107 10
*MATERIALS     EXAMPLES FROM REMOTE ASSOCIATES TEST                          01107  5
*LEVEL         ALL GRADES                                                    01107  8
*GENERAL       ALL CANDIDATES                                                01107  7
*HOURS         1                                                             01107  6
*EVALUATION    STUDENTS ENGAGE IN DEVELOPING A [BRAINSTORMING[ ACTIVITY      01107031
               AND IN SMALL GROUPS PARTICIPATE.                              01107032
*FILE          CREATIVITY  REMOTE ASSOCIATES TEST  BRAINSTORMING             01107  9
```

```
*OBJECTIVES    TO INCREASE STUDENT DIFFERENTIATION OF PROCESS INVOLVED IN01108026
               CREATIVE THOUGHT, AND TO EMPHASIZE THE IMPORTANCE OF          01108027
               DRAWING INFERENCES FOUNDED IN ACTUAL BEHAVIORS, AS            01108028
               EXEMPLIFIED BY THE QUESTIONS ASKED AND THE ANSWERS GIVEN      01108029
               IN THE FILM.                                                  01108030
*PREREQUISITE  PREVIOUS MODULE REQUIREMENTS IN CREATIVITY                    01108031
*EXPERIENCE    DIFFERENTIATION OF THE COGNITIVE PROCESSES INVOLVED IN        01108011
               CREATIVE THINKING CONTINUES.  STUDENTS ARE ASKED TO WRITE     01108012
               A SHORT PARAGRAPH ON WHAT WOULD HAPPEN IF EVERYONE WERE       01108013
```

```
                BORN WITH THREE FINGERS, NO THUMBS.  REPLIES ARE USED       01108014
                ANONYMOUSLY IN CLASS AS EXEMPLARS OF VARIOUS ELEMENTS OF    01108015
                CREATIVE THOUGHT.  STUDENTS DEVELOP CRITERION FOR JUDGING   01108016
                THE DEGREE OF CREATIVE THOUGHT.  STUDENTS DEVELOP           01108017
                CRITERION FOR JUDGING THE DEGREE OF CREATIVITY IN EACH      01108018
                ANSWER.  STUDENTS ARE EXPOSED TO ACTUAL EXAMPLES OF         01108019
                STUDENTS INVOLVED IN CREATIVE THINKING, SUCH AS EXCERPTS    01108020
                FROM THE FILM NO TWO ALIKE, WHICH ILLUSTRATES ANSWERS TO    01108021
                THE PREVIOUS QUESTION, AND DISCUSSES RESEARCH FINDINGS      01108022
                INTO CRITERION OF CREATIVE THOUGHT, SUCH AS: WIDE VARIETY   01108023
                OF RESPONSES, MANY SOLUTIONS, STRESS ON IMPORTANCE OF       01108024
                CHANGE, HUMOR, ETC.                                         01108025
*SETTING        LARGE GROUP  COLLEGE                                        01108 10
*MATERIALS      FILM CLIP FROM NO TWO ALIKE                                 01108  5
*LEVEL          ALL GRADES                                                  01108  8
*GENERAL        ALL CANDIDATES                                              01108  7
*HOURS          1 1/2                                                       01108  6
*EVALUATION     SAME AS MODULE 1109                                         01108032
*FILE           CREATIVITY  COGNITION  INFERENCES                           01108  9
```

```
*OBJECTIVES     TO DEVELOP STUDENT ABILITY TO DIFFERENTIATE AND SPECIFY     01109019
                THE TYPES OF COGNITIVE BEHAVIORS THEY SHOULD ANTICIPATE IN01109020
                POSING QUESTIONS IN THE CLASSROOM FROM THE VARIABLES        01109021
                INVOLVED IN THE SITUATION.                                  01109022
*PREREQUISITE PREVIOUS MODULE REQUIREMENTS ON CREATIVITY                    01109023
*EXPERIENCE     CONTINUATION OF PREVIOUS MODULES ON COGNITIVE PROCESSES IN01109011
                CREATIVE THOUGHT.  USING THE DEWEY HIERARCHY OF THOUGHT     01109012
                PROCESS IN TERMS OF COGNITIVE MEMORY, CONVERGENT THINKING,01109013
                ASSOCIATIVE THINKING, DIVERGENT THINKING, AND EVALUATIVE    01109014
                THINKING, AND THE GAGNE HIERARCHY OF THOUGHT PROCESS,       01109015
                DISCUSS THE SIMILARITIES AND DIFFERENCES BETWEEN HIGH       01109016
                PRODUCTION PROBLEM SOLVING AND CREATIVE THOUGHT.  STUDENTS01109017
                WORK WITH EXAMPLES OF EACH TYPE OF PROCESS.                 01109018
*SETTING        LARGE GROUP  COLLEGE                                        01109 10
*MATERIALS      EXAMPLES OF QUESTIONS AND ANSWERS INVOLVING CREATIVE        01109  5
                AND/OR PROBLEM SOLVING THOUGHT.                             01109
*LEVEL          ALL GRADES                                                  01109  8
*GENERAL        ALL CANDIDATES                                              01109  7
*HOURS          1                                                           01109  6
*EVALUATION     STUDENTS WRITE QUESTIONS IN THEIR PREFERRED SUBJECT AREA    01109024
                AND GRADE LEVEL BASED ON THE CRITERION OF WHAT TYPE OF      01109025
                ANSWER THEY WOULD EXPECT INVOLVING THE CHARACTERISTICS OF   01109026
                CREATIVE OR PROBLEM SOLVING THOUGHT PROCESSES.              01109027
*FILE           CREATIVITY  CLASSROOM  DEWEY - HIERARCHY OF THOUGHT SYSTEM01109  9
```

```
*OBJECTIVES     TO DEVELOP STUDENT ABILITY TO DEVELOP STRATEGIES OF         01110025
                CLASSROOM PLANNING WHICH WOULD FOSTER AN ATMOSPHERE TO      01110026
                ENCOURAGE CREATIVE BEHAVIOR AND HIGHER ORDER LEARNING       01110027
                INVOLVING PROBLEM SOLVING.                                  01110028
*PREREQUISITE PREVIOUS MODULES IN CREATIVITY                                01110029
*EXPERIENCE     DISCUSSION OF A CLASSROOM CLIMATE CONDUCIVE TO THE          01110011
                ENCOURAGEMENT OF THE TYPES OF THOUGHT PROCESSES NECESSARY   01110012
                IN PROBLEM SOLVING AND CREATIVE THOUGHT.  IDENTIFICATION    01110013
                OF THE IMPORTANCE OF FOSTERING FLEXIBILITY IN MOVING BACK   01110014
                AND FORTH BETWEEN ASSOCIATION THINKING AND EVALUATIVE       01110015
                THINKING IN THE CREATIVE COGNITIVE PROCESS.  DISCUSSION OF01110016
                THE TYPES OF CLASSROOM STRATEGIES WHICH WOULD FOSTER THIS   01110017
                TYPE OF ABILITY.  MODULESS DISCUSSION COULD COMMENCE WITH   01110018
                CLASS INVOLVEMENT IN ONE OF THE SO-CALLED (PROBLEM          01110019
              SOLVING[ GAMES FLOURISHING ON THE MARKET IN THE MAD         01110020
              SCRAMBLE OF MADISON AVENUE TO CAPITALIZE ON THE [LEARNING   01110021
              BY DISCOVERY[ APPROACH.  ANALYSIS WOULD CENTER ON THE       01110022
              INHERENT DANGERS INVOLVED IN THIS STRATEGY, BUT THE SOUND   01110023
              LEARNING PRINCIPLES AT ITS BASIS.                           01110024
*SETTING      LARGE GROUP  COLLEGE                                        01110 10
*MATERIALS    COMMERCIALLY DEVELOPED EDUCATIONAL PROBLEM SOLVING GAME     01110  5
              FOR USE IN ELEMENTARY CLASSROOMS.                           01110
*LEVEL        ALL GRADES                                                  01110  8
*GENERAL      ALL CANDIDATES                                              01110  7
*HOURS        2                                                           01110  6
*EVALUATION   STUDENT DEVISES A PLAN FOR A UNIT INVOLVING PROBLEM         01110030
              SOLVING WHICH WOULD ENCOURAGE EVALUATIVE THINKING, AND      01110031
              SPELLS OUT THE CRITERIA BEING USED, AND HOW THEY WILL BE    01110032
              MET.                                                        01110033
*FILE         CREATIVITY  CLIMATE OF CLASSROOM  PROBLEM SOLVING           01110  9
```

```
*OBJECTIVES   TO INTEGRATE CONCEPTS FROM DEVELOPMENT, MOTIVATION,         01111028
              LEARNING THEORY, AND CREATIVITY AT THE BEHAVIORAL LEVEL TO01111029
              PROVIDE SPECIFICS FOR STUDENTS IN TERMS OF BEHAVIORS FROM   01111030
              WHICH TO DRAW INFERENCES AND MAKE DECISIONS.                01111031
*PREREQUISITE PREVIOUS MODULES IN CREATIVITY                              01111032
*EXPERIENCE   CONTINUES DEVELOPMENT OF CONCEPT OF AN ATMOSPHERE WHICH     01111011
              FOSTERS CREATIVE AND PROBLEM SOLVING THOUGHT.  REVIEW OF    01111012
              TASK AND PERSONALITY VARIABLES DEVELOPED IN PREVIOUS        01111013
              MODULE.  REINTRODUCTION OF CONCEPTS FROM MODULES ON         01111014
              MOTIVATION DEALING WITH RISK TAKING, LEVEL OF ASPIRATION,   01111015
              COGNITIVE DISSONANCE, AND THEIR ROLE IN COGNITIVE           01111016
              PROCESSES.  REINTRODUCTION OF BLOOMSS CONCEPT OF THE        01111017
              NEGATIVELY ACCELERATING GROWTH CURVE DEVELOPED IN MODULES   01111018
              ON CHILD DEVELOPMENT.  DISCUSSION SHIFTS TO EMPHASIS.ON     01111019
              EARLY DEVELOPMENT.  REINTRODUCTION OF CONCEPTS ON TASK AND01111020
              PERSONALITY VARIABLES DEVELOPED IN MODULES ON MOTIVATION    01111021
              DEALING WITH RISK TAKING, LEVEL OF ASPIRATION, COGNITIVE    01111022
              DISSONANCE IN TERMS OF FAMILY INFLUENCE.  DISCUSSION OF     01111023
              FACTORS RESEARCH INDICATES ARE ASSOCIATED WITH INDIVIDUALS01111024
              HIGH IN CREATIVITY AND FOUND IN THEIR HOME BACKGROUND.      01111025
              SUCH AS MOTHERS TENDING TO HAVE CAREERS OF THEIR OWN,       01111026
              HOMES OFTEN MOVED, ETC.  SEE WALLACH AND KOGAN.             01111027
*SETTING      LARGE GROUP  COLLEGE                                        01111 10
*MATERIALS    BLANK                                                       01111  5
*LEVEL        ALL GRADES                                                  01111  8
*GENERAL      ALL CANDIDATES                                              01111  7
*HOURS        1                                                           01111  6
*EVALUATION   STUDENTS MUST BE ABLE TO IDENTIFY AT LEAST 10 PRINCIPLES    01111033
              ON CREATIVITY AND ITS RELATION TO TASK AND PERSONALITY      01111034
              VARIABLES.                                                  01111035
*FILE         CREATIVITY  CLIMATE  INTEGRATION OF CONCEPTS                01111  9
```

```
*OBJECTIVES   TO CONTINUE DIFFERENTIATION OF TASK AND PERSONALITY         01112037
              VARIABLES ASSOCIATED WITH VARIOUS COMBINATIONS OF           01112038
              CREATIVITY AND INTELLIGENCE PRESENT IN INDIVIDUALS.  FROM   01112039
              THE INFERENCES DRAWN FROM SPECIFIC BEHAVIORS STUDENTS       01112040
              SHOULD BE ABLE TO CONSTRUCT AN IMAGE OF THE SPECIFICS       01112041
              NECESSARY IN CREATION OF A CLASSROOM CLIMATE THAT FOSTERS   01112042
              CREATIVE AND PROBLEM SOLVING THOUGHT.                       01112043
*PREREQUISITE PREVIOUS MODULES IN CREATIVITY                              01112044
*EXPERIENCE   CONTINUATION OF DISCUSSION OF CREATING A CLASSROOM CLIMATE01112011
              WHICH ENCOURAGES THE TYPES OF COGNITIVE PROCESSES SEEN IN   01112012
```

```
                CREATIVE AND PROBLEM SOLVING THOUGHT.  USING THE LESSON   01112013
                PLANS DEVELOPED BY STUDENTS IN THE PREVIOUS MODULE, FOCUS 01112014
                SHIFTS TO IMPORTANCE OF THIS ATMOSPHERE BEING             01112015
                ALL-PERVASIVE AT ALL TIMES IN THE CLASSROOM.  THAT IS, THE01112016
                EFFECT OF A CONSISTENT AND POWERFUL ENVIRONMENT, NOT ONE  01112017
                EXEMPLIFIED BY AN OCCASIONAL LESSON PLAN USING (LEARNING  01112018
                BY DISCOVERY( AS A PANACEA.  STUDENTS ARE ASKED TO        01112019
                CONSIDER TASK AND PERSONALITY VARIABLES THAT THEY MIGHT   01112020
                USE IN JUDGING STUDENTS IN TERMS OF COMBINATIONS OF       01112021
                INTELLIGENCE AND CREATIVITY.  TO AID STUDENTS, DISCUSSION 01112022
                IS CONFINED TO HIGH≤S AND LOW≤S ---- THAT IS, STUDENTS    01112023
                CONSIDERED HIGH INTELLIGENCE, HIGH CREATIVES+ THOSE OF LOW01112024
                INTELLIGENCE, LOW CREATIVITY+ HIGH≤S, LOW≤S AND LOW≤S     01112025
                HIGH≤S.  STUDENTS UTILIZE RATING SCALE.  ON THE BASIS OF  01112026
                THIS ANALYSIS, STUDENTS ARE ASKED TO COMMENT IN TERMS OF  01112027
                SUCH NOTIONS AS REGROUPING ON THE TWO VARIABLES RATHER    01112028
                THAN ON THE BASIS OF INTELLIGENCE AS EXEMPLIFIED BY       01112029
                ACADEMIC PERFORMANCE, OR SUCH IDEAS AS USING THE ANALYZED 01112030
                VARIABLES IN OUTLINING A SPECIFIC PLAN FOR CREATING A     01112031
                CONSISTENT CLIMATE IN THE CLASSROOM BASED UPON THE        01112032
                VARIABLES.  THE INSTRUCTOR SHOULD UTILIZE THE FINDINGS OF 01112033
                WALLACH AND KOGAN IN THE TASK AND PERSONALITY VARIABLES   01112034
                FOUND AMONG FIFTH GRADERS BASED ON CREATIVITY AND         01112035
                INTELLIGENCE.                                             01112036
*SETTING        LARGE GROUP  COLLEGE                                      01112 10
*MATERIALS      READINGS IN WALLACH AND KOGAN                             01112  5
*LEVEL          ALL GRADES                                                01112  8
*GENERAL        ALL CANDIDATES                                            01112  7
*HOURS          1                                                         01112  6
*EVALUATION     SAME AS MODULE 1114                                       01112045
*FILE           CREATIVITY  CLIMATE  (LEARNING BY DISCOVERY(              01112  9
```

```
*OBJECTIVES     TO INTEGRATE FOR THE STUDENT THE CONCEPT OF HUMAN BEHAVIOR01113034
                AS A MODEL OF INCREASINGLY COMPLEX PROCESSES, AND THE     01113035
                CONCEPT OF THE INDIVIDUAL AS A REFLECTION OF HIS CULTURE, 01113036
                RATHER THAN AS AN ISOLATE IN THE CLASSROOM.  TO INTRODUCE 01113037
                THE CONCEPT OF CHILD PLAY JUXTAPOSED WITH THE CONCEPT OF  01113038
                ADULT PLAY.                                               01113039
*PREREQUISITE PREVIOUS MODULES ON CREATIVITY, CHILD DEVELOPMENT,          01113040
                MOTIVATION, LEARNING                                      01113041
*EXPERIENCE     DISCUSSION MOVES FROM CREATIVITY IN THE FAMILY SETTING TO 01113011
                DISCUSSION OF THE ROLE OF CREATIVE THOUGHT IN SOCIETY.    01113012
                DEBATE TEAMS DISCUSS BERTRAND RUSSELL≤S DEFENSE OF THE    01113013
                LEISURE CLASS AND HIS CONDEMNATION OF OUR CIVILIZATION≤S  01113014
                CULT OF EFFICIENCY.  STUDENTS SHOULD TRANSFER DISCUSSION  01113015
                OF CLASSROOM CLIMATE TO DISCUSSION OF THE CULTURE AS A    01113016
                CLIMATE FOR FOSTERING CREATIVE THOUGHT PROCESSES,  ≥THIS  01113017
                IS EVALUATION OF MATERIAL DEVELOPED IN PREVIOUS MODULES.+ 01113018
                DISCUSSION CENTERS ON MODEL OF MAN IN THE FUTURE, AND     01113019
                CONCEPT OF MAN AS A SOCIAL CHARACTER.  INTRODUCTION OF D. 01113020
                REISSMAN≤S THREE MODELS OF MAN, EMPHASIZING ROLE OF       01113021
                AUTONOMOUS MAN IN ACCRETION OF BENEFITS TO SOCIETY.       01113022
                STUDENTS ANALYZE THE TYPES OF BEHAVIORS TYPICAL OF THIS   01113023
                TYPE OF INDIVIDUAL AND INFER FROM THESE SPECIFIC BEHAVIORS01113024
                THE POSSIBLE TYPES OF COGNITIVE PROCESSES HE UTILIZES.    01113025
                INTEGRATION HERE OF PAST MATERIALS ON LEARNING,           01113026
                MOTIVATION, CHILD DEVELOPMENT.  THE IMPORTANCE OF         01113027
                AUTONOMOUS MAN (PLAYING( WITH IDEAS, SENSING GAPS AND     01113028
                MAKING THEM FIT REALITY ON A RATIONAL BASIS IS INTEGRATED 01113029
                WITH PREVIOUS DISCUSSION OF ERIKSON≤S EMPHASIS ON         01113030
```

```
               CREATIVE BEHAVIOR AND ITS CULTURAL IMPLICATIONS IN HIS    01113031
               LATER STAGES OF HUMAN DEVELOPMENT, AS DISCUSSED IN CHILD  01113032
               DEVELOPMENT MODULES.                                      01113033
*SETTING       LARGE GROUP  COLLEGE                                      01113 10
*MATERIALS     READINGS IN RUSSELLSS [IN DEFENSE OF LEISURE[, AND D.     01113  5
               REISSMANSS THE LONELY CROWD                               01113
*LEVEL         ALL GRADES                                                01113  8
*GENERAL       ALL CANDIDATES                                            01113  7
*HOURS         2                                                         01113  6
*EVALUATION    SAME AS MODULE 1114                                       01113042
*FILE          CREATIVITY  SOCIETY + FAMILY  RUSSELL + REISSMAN          01113  9
```

```
*OBJECTIVES    INTEGRATION OF THE GENERALIZED CONCEPT OF CHILD PLAY WITH 01114022
               THE COGNITIVE PROCESSES INVOLVED IN CREATIVE THOUGHT, AND 01114023
               WITH THE CULTURAL CLIMATE NECESSARY FOR THIS ACTIVITY TO  01114024
               CONTINUE INTO MATURITY.  EMPHASIS ON THE SIMILAR ASPECTS  01114025
               INVOLVED IN PLAY AND MATURE CREATIVE EXPRESSION.          01114026
*PREREQUISITE PREVIOUS MODULES IN CREATIVITY, LEARNING THEORY,           01114027
               MOTIVATION, CHILD DEVELOPMENT                             01114028
*EXPERIENCE    INTEGRATION OF THE REISSMAN CONCEPT OF THE IMPORTANCE OF  01114011
               [PLAYING WITH IDEAS[, SENSING GAPS AND MAKING THEM FIT    01114012
               REALITY ON A RATIONAL BASIS IS JUXTAPOSED BESIDE THE      01114013
               PIAGETIAN CONCEPT OF ADAPTATION.  REVIEW OF CHILD         01114014
               DEVELOPMENT SEQUENCE ON THE COGNITIVE PROCESSES OF        01114015
               ASSIMILATION AND ACCOMMODATION.  EMPHASIS FOCUSES ON THE  01114016
               PROCESS OF THE VARIOUS STEPS INVOLVED IN THE PROCESS OF   01114017
               ASSIMILATION, AND ITS CLOSENESS TO THE REISSMAN MODEL OF  01114018
               [PLAYING TO FILL IN GAPS[,  DISCUSSION OF REISSMANSS THREE01114019
               STAGES OF RATIONALITY AS THEY INVOLVE PIAGETSS PROCESS OF 01114020
               ASSIMILATION, COUPLED WITH ACCOMMODATION.                 01114021
*SETTING       LARGE GROUP  COLLEGE                                      01114 10
*MATERIALS     READINGS IN PIAGETSS PLAY, DREAMS, AND IMITATION IN       01114  5
               CHILDHOOD                                                 01114
*LEVEL         ALL GRADES                                                01114  8
*GENERAL       ALL CANDIDATES                                            01114  7
*HOURS         1                                                         01114  6
*EVALUATION    STUDENTS ARE GIVEN A CASE STUDY INVOLVING THE CONCEPTS    01114029
               DEVELOPED IN THE MODULES ON CREATIVITY, ARE POSED A       01114030
               PROBLEM IN TERMS OF A CLASSROOM SITUATION, AND MUST       01114031
               INTEGRATE THE VARIABLES INVOLVED IN THE RELATIONSHIP      01114032
               CREATIVITY TO THE COMPLEX BEHAVIORS IN THE CLASSROOM.     01114033
*FILE          CREATIVITY  PIAGET  ADAPTATION + [PLAYING WITH IDEAS[     01114  9
```

```
*OBJECTIVES    INTRODUCTORY CONCEPTS IN PERSONALITY THEORY.  STUDENTS ARE01115027
               TO DEVELOP AN UNDERSTANDING OF THE IMPORTANT ROLE OF      01115028
               PERCEPTION IN TERMS OF DEVELOPMENT OF PSYCHOLOGICAL       01115029
               INDEPENDENCE                                              01115030
*PREREQUISITE PREVIOUS STUDY IN LEARNING THEORY, MOTIVATION, CHILD       01115031
               DEVELOPMENT                                               01115032
*EXPERIENCE    OPENING DISCUSSION IN A SERIES TO ANALYZE THE ROLE OF     01115011
               PERSONALITY VARIABLES IN THE EVENTUAL BEHAVIORS OF AN     01115012
               INDIVIDUAL.  STUDENTS SEE A SHORT FILM CLIP OF A MONTAGE  01115013
               OF SHOTS OF HIGH HURDLERS, BALLET DANCERS, FIGURE SKATERS,01115014
               SLOLAM SKIIERS, IN MOTION, SLOW LEARNERS ON BALANCE       01115015
               BOARDS, TRAMPOLINES, ETC.  DISCUSSION OF AWARENESS OF     01115016
               PHYSICAL POSITION IN SPACE, IN TERMS OF THE PERCEPTUAL    01115017
               PRINCIPLES OF ORGANIZATION OF PUTTING AS MANY SENSORY     01115018
               IMAGES AS POSSIBLE ONTO ONE THING.  DISCUSSION OF FIELD   01115019
               DEPENDENCE AND INDEPENDENCE IN TERMS OF RELATIONSHIP WITH 01115020
               THE ENVIRONMENT, AND THE RELATIONSHIP OF FIELD              01115021
               INDEPENDENCE WITH PSYCHOLOGICAL INDEPENDENCE.  STUDENTS     01115022
               SHOULD FROM PAST LEARNING OF THE IMPORTANCE OF              01115023
               DISCRIMINATION AND GENERALIZATION IN LEARNING THEORY AND    01115024
               CHILD DEVELOPMENT DEVELOP THIS IN CONJUNCTION WITH          01115025
               DEVELOPMENT OF PSYCHOLOGICAL INDEPENDENCE.                  01115026
*SETTING       LARGE GROUP  COLLEGE                                        01115 10
*MATERIALS     READINGS IN ROTOR, BANDURA AND WALTERS, DOLLARD AND MILLER01115  5
               FILM CLIP AS OUTLINED ABOVE                                 01115
*LEVEL         ALL GRADES                                                  01115  8
*GENERAL       ALL CANDIDATES                                              01115  7
*HOURS         1                                                           01115  6
*EVALUATION    A SHORT PAPER DISCUSSING THE IMPLICATIONS OF BODY IMAGE IN01115033
               THE CLASSROOM E.G. AS REFLECTED IN SLOW READERS, WHY BOYS  01115034
               TEND TO HAVE BETTER BODY IMAGE, YET OFTEN POORER READERS,  01115035
               ETC.                                                        01115036
*FILE          PERSONALITY  PERCEPTION  INDEPENDENCE                       01115  9
```

```
*OBJECTIVES    TO INTEGRATE PREVIOUS LEARNING CONCERNING THE PROCESSES OF01116026
               DIFFERENTIATION AND GENERALIZATION IN CLASSROOM SUBJECTS   01116027
               WITH THE CONCEPT OF REALITY TESTING IN TERMS OF             01116028
               PERSONALITY DEVELOPMENT.  TO DEVELOP THE CONCEPT OF         01116029
               PRIMARY AND SECONDARY THOUGHT PROCESSES.                    01116030
*PREREQUISITE PREVIOUS MODULES ON PERSONALITY AND LEARNING THEORY AND     01116031
               CHILD DEVELOPMENT                                           01116032
*EXPERIENCE    BRIEF DISCUSSION OF THE PROCESSES OF DIFFERENTATION AND     01116011
               GENERALIZATION AS OUTLINED IN STUDENTS PREVIOUS WORK IN    01116012
               LEARNING THEORY.  STUDENTS SHOULD BE ABLE TO DEVELOP        01116013
               CONCEPT OF INCREASING SKILLS IN THESE TWO PROCESSES. AS     01116014
               REFLECTED IN THE FILM CLIP OF THE ATHLETES, AND FROM THEIR01116015
               PAPERS ASSIGNED IN THE PREVIOUS MODULES IN TERMS OF         01116016
               READING SKILLS, ETC.  DISCUSSION COMES TO FOCUS ON THESE   01116017
               TWO PROCESSES IN RELATION TO THE INDIVIDUALSS               01116018
               PSYCHOLOGICAL RELATIONSHIP TO HIS ENVIRONMENT, AND THE      01116019
               IMPORTANCE OF SKILL IN DIFFERENTIATION AND GENERALIZATION 01116020
               IN REALITY TESTING.  DISCUSSION OF PRIMARY THOUGHT          01116021
               PROCESSES AND DEVELOPMENT OF SECONDARY THOUGHT PROCESSES   01116022
               THROUGH SKILL IN DIFFERENTIATION AND GENERALIZATION.        01116023
               DISCUSSION EMPHASIZES THE PSYCHOLOGICAL ASPECTS OF REALITY01116024
               TESTING.                                                    01116025
*SETTING       LARGE GROUP  COLLEGE                                        01116 10
*MATERIALS     READINGS DISCUSSING THE FREUDIAN CONCEPT OF REALITY         01116  5
               TESTING AND PRIMARY AND SECONDARY THOUGHT PROCESSES         01116
*LEVEL         ALL GRADES                                                  01116  8
*GENERAL       ALL CANDIDATES                                              01116  7
*HOURS         2                                                           01116  6
*EVALUATION    SAME AS MODULE 1117.                                        01116033
*FILE          PERSONALITY  FREUDIAN THEORY  REALITY TESTING               01116  9
```

```
*OBJECTIVES    TO DEVELOP UNDERSTANDING OF THE CONSEQUENCES IN TERMS OF   01117023
               BEHAVIORS THAT RESULT FROM EXPERIENCES IN REALITY TESTING.01117024
               AWARENESS OF THE FACTORS INVOLVED IN BEHAVIOR CATEGORIZED 01117025
               AS INVOLVING REACTIONS OF HELPLESSNESS.                     01117026
*PREREQUISITE PREVIOUS MODULES IN PERSONALITY AND PREREQUISITES LISTED   01117027
               THEREIN.                                                    01117028
*EXPERIENCE    DISCUSSION CENTERS ON DEVELOPMENT OF ANXIETY ARISING FROM 01117011
               ATTEMPTS AT REALITY TESTING.  DISCUSSION INVOLVES FROMMSS  01117012
               CONCEPT OF MANSS FEELING OF HELPLESSNESS IN RELATION TO    01117013
               DEALING WITH THE ENVIRONMENT.  STUDENTS WATCH VIDEO TAPES 01117014
               OF TEACHERS INVOLVED IN THEIR FIRST DAY OF EMPLOYMENT AS  01117015
               CLASSROOM TEACHERS, THE HANDLING OF PROBLEMS, THE         01117016
               OUTCOMES, AND THEIR RESULTING REACTIONS.  TAPES CONTAIN   01117017
               DISCUSSION BY THE TEACHER WITH AN INTERVIEWER OF THE      01117018
               EXPERIENCE.  STUDENTS DEVELOP THE CONCEPT OF              01117019
               [HELPLESSNESS[ IN TERMS OF ANALYZING THIS HYPOTHETICAL    01117020
               CONSTRUCT INTO FACTORS SUCH AS INFERIORITY FEELINGS,      01117021
               HOSTILITY, AGGRESSIVENESS, ETC.                           01117022
*SETTING       LARGE GROUP  COLLEGE                                      01117 10
*MATERIALS     FILM EXCERPTS OUTLINED ABOVE READINGS IN FROMM≤S MAN FOR  01117  5
               HIMSELF                                                   01117
*LEVEL         ALL GRADES                                                01117  8
*GENERAL       ALL CANDIDATES                                            01117  7
*HOURS         3                                                         01117  6
*EVALUATION    STUDENTS ROLE PLAY CLASSROOM SITUATIONS, TAPE THEM,       01117029
               DISCUSS THEIR REACTIONS IN SMALL GROUPS.                  01117030
*FILE          PERSONALITY  REALITY TESTING  ERIC FROMM                  01117  9

*OBJECTIVES    CONTINUATION OF DISCUSSION ON BEHAVIORAL REACTIONS.       01118026
               DIFFERENTATION OF [NORMAL[ AND PATHOGENIC BEHAVIORS.      01118027
               STUDENTS SHOULD HAVE DEVELOPED AN UNDERSTANDING OF THE    01118028
               DIFFERENCES IN THE PURPOSES OF USING VERY SIMILAR         01118029
               BEHAVIORS BUT WITH DIFFERENT CONSEQUENCES.                01118030
*PREREQUISITE PREVIOUS MODULES ON PERSONALITY THEORY AND PREREQUISITES  01118031
               SPECIFIED THEREIN                                         01118032
*EXPERIENCE    STUDENTS VIEW FILM CLIPS OF CHILDREN REACTING TO          01118011
               SITUATIONS IN A MANNER CONSIDERED PATHOGENIC.  FILMS WOULD01118012
               INVOLVE CHILD BEING INTERVIEWED BY CLINICIAN AT CONCLUSION01118013
               OF THE SEQUENCE.  DISCUSSION WOULD CENTER ON DEFENSE      01118014
               MECHANISMS UTILIZED BY INDIVIDUALS.  INSTRUCTOR WOULD THEN01118015
               FOCUS ON REGRESSION AS A DEFENSE MECHANISM, AND DISCUSS   01118016
               ITS ROLE IN PLAY ACTIVITIES.  STUDENTS ARE ASKED TO RECALL01118017
               PREVIOUS LEARNING IN THE AREA OF CREATIVITY AND PLAY AS   01118018
               COGNITIVE PROCESSES.  DISCUSSION OF REGRESSION IN DEFENSE 01118019
               OF THE EGO.  STUDENTS SHOULD CONCENTRATE ON               01118020
               DISCRIMINATIONS BETWEEN PATHOGENIC DEFENSE MECHANISMS AND 01118021
               COPING MECHANISMS IN TERMS NOT OF THE BEHAVIOR PER SE BUT 01118022
               IN TERMS OF THE RESULTS OF PERFORMING THE BEHAVIOR.  E.G. 01118023
               PATHOGENIC DEFENSE MECHANISMS DON≤T SOLVE ANYTHING BUT    01118024
               OFFER ONLY TEMPORARY RELIEF.                              01118025
*SETTING       LARGE GROUP  COLLEGE                                      01118 10
*MATERIALS     FILM CLIP AS OUTLINED ABOVE                               01118  5
*LEVEL         ALL GRADES                                                01118  8
*GENERAL       ALL CANDIDATES                                            01118  7
*HOURS         3                                                         01118  6
*EVALUATION    SAME AS MODULE 1119.                                      01118033
*FILE          PERSONALITY  NORMAL BEHAVIOR  PATHOGENIC BEHAVIOR         01118  9

*OBJECTIVES    TO DEVELOP AN UNDERSTANDING OF THE IMPACT OF AN           01119027
               INDIVIDUAL≤S PERCEPTIONS IN TERMS OF DRAWING INFERENCES   01119028
               FROM THE BEHAVIOR OF ANOTHER INDIVIDUAL.  LEADS INTO      01119029
               DISCUSSION OF ROLE AND SOCIAL EXPECTATION                 01119030
*PREREQUISITE PREVIOUS MODULES ON PERSONALITY AND THE PREREQUISITES     01119031
               INVOLVED IN THOSE MODULES                                 01119032
*EXPERIENCE    STUDENTS ENGAGE IN A SESSION OF [SENSITIVITY TRAINING[    01119011
               WITH ANOTHER MEMBER OF THE CLASS IN TERMS OF DEVELOPING AN01119012
               UNDERSTANDING OF ANOTHER PERSON THROUGH INTERACTION.      01119013
               STUDENTS SHOULD DEVELOP THE REALIZATION OF THE IMPORTANCE 01119014
               OF THEIR ROLE IN PERCEIVING ACCURATELY THE OTHER PERSON≤S 01119015
```

```
              OVERT BEHAVIORS AND VERBALIZATIONS, IN TERMS OF           01119016
              CONSTRUCTING A MODEL OF THAT INDIVIDUAL.  STUDENTS ARE    01119017
              ASKED TO GENERALIZE THE USUAL [MODUS OPERANDI[ OF THIS    01119018
              INDIVIDUAL OUTISDE THE CLASSROOM.  STUDENTS WILL RECOGNIZE01119019
              THIS AS HYPOTHETICAL, BUT WILL DEVELOP THE CONCEPT OF THE 01119020
              LIFE STYLE OF AN INDIVIDUAL IN TERMS OF GOAL STRIVINGS.   01119021
              DISCUSSION FOCUSES ON THE PERSONA MASK WORN BY INDIVIDUALS01119022
              IN RESPONSE TO SOCIAL CONVENTIONS+ MASKS FORMED PARTLY    01119023
              CONSCIOUSLY VIA SOCIAL ROLES AND PARTLY UNCONSCIOUSLY VIA 01119024
              IDENTIFICATION.  WILL LEAD INTO DISCUSSION OF ROLE THEORY 01119025
              IN NEXT MODULES.                                          01119026
*SETTING      LARGE GROUP  COLLEGE                                      01119 10
*MATERIALS    READINGS IN ROTOR<S DISCUSSION OF SOCIAL CONDITIONING,    01119  5
              FROMM<S DISCUSSION OF MAN<S UNIQUENESS, ADLER<S CONCEPTION01119
              OF MAN<S MODUS OPERANDI IN GOAL STRIVING.                 01119
*LEVEL        ALL GRADES                                                01119  8
*GENERAL      ALL CANDIDATES                                            01119  7
*HOURS        2                                                         01119  6
*EVALUATION   STUDENTS TAPE ANOTHER SESSION OF [MODIFIED SENSITIVITY    01119033
              TRAINING[, AND THEIR PERCEPTIONS OF THE INDIVIDUAL IN     01119034
              TERMS OF MODUS OPERANDI INFERRED FROM THEIR INTERACTION   01119035
              WITH THIS INDIVIDUAL.  STUDENTS CRITIQUE THE RESULTS      01119036
              UTILIZING THE CONCEPTS SUPPOSEDLY GLEANED FROM THE MODULES01119037
*FILE         PERSONALITY  SENSITIVITY TRAINING  [MODUS OPERANDI[       01119  9
```

```
*OBJECTIVES   TO PROVIDE STUDENTS WITH AN EXPERIENTIAL BASE IN THEIR OWN11120027
              USE OF ROLE AND STEREOTYPING+ TO BEGIN DEVELOPING AN      11120028
              UNDERSTANDING OF ACTUAL AND INFERRED ROLE BEHAVIOR+ AND TO11120029
              BEGIN TO DEVELOP AN UNDERSTANDING OF THE RELATIONSHIP AND 11120030
              INTERACTION BETWEEN ROLE AND PERSONALITY.                 11120031
*PREREQUISITE SOME PREVIOUS UNDERSTANDING OF PERSONALITY                11120032
*EXPERIENCE   INTRODUCTION TO SOCIAL BEHAVIOR, ITS CONCEPTS,            11120011
              DETERMINANTS, PROCESSES, AND INTERACTION WITH INDIVIDUALS.11120012
              TO INTRODUCE THIS AREA, A TAPE WILL BE USED IN WHICH THE  11120013
              STUDENTS WILL HEAR ONLY ONE-HALF OF A TELEPHONE           11120014
              CONVERSATION BETWEEN A TEACHER AND HER PRINCIPAL.  THE    11120015
              DISCUSSION LEADER WILL THEN ASK THE STUDENTS TO DISCUSS   11120016
              AND DESCRIBE BOTH THE TEACHER WHOM THEY HEARD SPEAKING AND11120017
              THE PRINCIPAL WHO WAS SUPPOSEDLY ON THE OTHER END OF THE  11120018
              LINE.  THE ROLE OF THE INSTRUCTOR IS TO DIRECT THE        11120019
              DISCUSSION TOWARD THE EVIDENCE WHICH IS DIRECT IN THIS    11120020
              DESCRIPTIVE PROCESS AND THAT WHICH IS INFERRED AND THEN TO11120021
              DIRECT THE DISCUSSION TO THE CHARACTERISTICS OF PEOPLE IN 11120022
              BOTH THOSE TWO POSITIONS AND FINALLY TO HOW THE STUDENTS  11120023
              WOULD SEE THEMSELVES IN THOSE POSITIONS AND HOW THE PHONE 11120024
              CONVERSATION MIGHT HAVE GONE IF THEY HAD BEEN ON ONE OR   11120025
              THE OTHER END OF THE LINE.                                11120026
*SETTING      SMALL GROUP >1-12 STUDENTS,  COLLEGE                      11120 10
*MATERIALS    A TAPE OF ONE HALF OF A TELEPHONE CONVERSATION BETWEEN    11120  5
              SUPPOSEDLY A TEACHER AND HER PRINCIPAL ON AN ISSUE        11120
              CONCERNING A PARTICULAR STUDENT OR PARENT INVOLVING       11120
              CONTROVERSY.                                              11120
*LEVEL        ALL GRADES                                                11120  8
*GENERAL      ALL CANDIDATES                                            11120  7
*HOURS        1/2-1                                                     11120  6
*EVALUATION   LEVEL OF GROUP PARTICIPATION >AMOUNT+ AND DIRECTIVE       11120033
              QUALITY OF PARTICIPATION >WHETHER OR NOT STUDENTS BEGAN TO11120034
              FOCUS IN ON THE CONCEPTS OF ROLE, STEREOTYPING, AND       11120035
              PERSONALITY+                                              11120036
*FILE         ROLE  SOCIAL INTERACTION  SOCIAL BEHAVIOR                 11120  9
```

```
*OBJECTIVES    KNOWLEDGE BASE IN THE CONCEPTS, PRINCIPLES, AND PROCESSES 01120026
               OF ROLE AND STEREOTYPE FOR CONTINUED UNDERSTANDING OF THE 01120027
               SOCIAL DETERMINANTS INHERENT IN THE EDUCATIONAL SETTING   01120028
               AND THEMSELVES AS ACTING WITHIN THESE DETERMINANT         01120029
               STRUCTURES.                                               01120030
*PREREQUISITE PREVIOUS MODULE ON ROLES AND STEREOTYPING, READINGS IN    01120031
               ROLE THEORY AND SOCIALI ELEMENTS OF EDUCATIONAL SETTINGS. 01120032
*EXPERIENCE    CONTENT LECTURE ON ROLE, STEREOTYPES, AND ROLE-PERSONALITY01120011
               INTERACTION.  BASED UPON PREVIOUS DISCUSSION OF TAPED     01120012
               TELEPHONE CONVERSATION BETWEEN TEACHER AND PRINCIPAL,     01120013
               INSTRUCTOR SHOULD PROVIDE THE CONTENT BASES OF SOCIAL     01120014
               ROLES, THE DIFFERENTIATION BETWEEN ROLE AND PERSONALITY   01120015
               AND THEN THE NATURE OF THE INTERACTION BETWEEN THEM. THE  01120016
               PRINCIPLES OF ROLE-REQUIREDNESS, NORMS, CONFORMITY, AND   01120017
               DEVIANCY, THE IDEA OF THE ROLE-SET AND THE IDEA OF INTER  01120018
               AND INTRA ROLE CONFLICTS.  AGAIN RELATING TO THE PREVIOUS 01120019
               MODULE, THE TEACHER SHOULD INTRODUCE THE IDEA OF          01120020
               STEREOTYPES AND STEREOTYPING INCLUDING THE IMPORTANCE OF  01120021
               STEROTYPES IN THE SOCIAL SYSTEM AND THE DANGERS,          01120022
               ESPECIALLY THE IDEA OF ETHNOCENTRISM.  THIS SHOULD LEAD TO01120023
               THE DISCUSSION OF SOCIAL JUSTIFICATION, ATTITUDES AND     01120024
               VALUING AS PROCESSES OF THE ROLE-STEREOTYPIC RELATIONSHIP.01120025
*SETTING       LARGE GROUP  COLLEGE                                      01120 10
*MATERIALS     BLANK                                                     01120  5
*LEVEL         ALL GRADES                                                01120  8
*GENERAL       ALL CANDIDATES                                            01120  7
*HOURS         2-3                                                       01120  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION OF ACQUISITION OF CONTENT     01120033
               INCORPORATING BOTH MASTERY AND DISCRIMINATION ITEMS.      01120034
*FILE          ROLE  SOCIAL INTERACTION  STEROTYPES                      01120  9
```

```
*OBJECTIVES    DIRECT APPLICATION OF CONTENT OF PREVIOUS MODULES TO      01121026
               STUDENTS≤ OWN PERSONAL INVOLVEMENT IN THE COLLEGE         01121027
               CLASSROOM.  TO PROVIDE STUDENTS WITH AN EXPERIENTIAL BASE 01121028
               IN USING THE CONCEPTS AND PRINCIPLES OF ROLE IN RELATION  01121029
               TO THEMSELVES.  SHOULD LEAD TO GREATER ATTENTION ON PART  01121030
               OF STUDENTS TO THESE ELEMENTS IN LEARNING SIT.            01121031
*PREREQUISITE PREVIOUS MODULES ON ROLES AND STEREOTYPES AND ASSIGNED    01121032
               READINGS.                                                 01121033
*EXPERIENCE    DISCUSSION OF STUDENT ROLES, STEREOTYPES, ROLE-PERSONALITY01121011
               INTERACTION, STUDENT-TEACHER ROLE INTERACTION, STUDENT-   01121012
               TEACHER ROLE-PERSONALITY INTERACTION AND THE ROLE         01121013
               PRINCIPLES AND PROCESSES SURROUNDING THE COLLEGE          01121014
               CLASSROOM.  IN THIS DISCUSSION THE INSTRUCTOR SHOULD      01121015
               DIRECT THE CONTENT TO STUDENTS≤ IDENTIFICATION OF         01121016
               THEMSELVES WITHIN A SET OF ROLES, HOW THEIR PERSONALITY   01121017
               INTERACTS WITH THIS SET, THE PROBLEMS ENCOUNTERED, AND    01121018
               THEN TO THE ROLE RELATIONSHIP BETWEEN TEACHER AND STUDENT 01121019
               AND HOW THE EFFECT OF PERSONALITY RELATES TO THIS.        01121020
               EMPHASIS SHOULD BE UPON USING THE STUDENTS≤ OWN CLASSROOM 01121021
               AS THE BASIS FOR EXEMPLAR INPUT.  SPECIAL EMPHASIS SHOULD 01121022
               BE PLACED ON ROLE DEMANDS, TOLERANCE OF AMBIGUITY,        01121023
               TOLERANCE OF ROLE DEVIATION AND THE TYPES OF CONFLICTS    01121024
               WHICH ARISE.                                              01121025
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01121 10
*MATERIALS     BLANK                                                     01121  5
*LEVEL         ALL GRADES                                                01121  8
*GENERAL       ALL CANDIDATES                                            01121  7
```

```
*HOURS        1/2-1                                                    01121  6
*EVALUATION   LATER EVALUATION OF THE DEGREE TO WHICH ATTEND AND DEAL  01121034
              WITH THIS ELEMENT OF THE LEARNING SITUATION.             01121035
*FILE         ROLE  SOCIAL INTERACTION  CLASSROOM                      01121  9
```

```
*OBJECTIVES   DEVELOP UNDERSTANDING OF THE NATURE AND OPERATION OF ROLES01122025
              IN THE ELEMENTARY SITUATION AND TO HAVE STUDENTS CONTINUE 01122026
              TO APPLY THE KNOWLEDGE AND PRINCIPLES OF ROLE AND SOCIAL  01122027
              BEHAVIOR TO A SPECIFIC SETTING.                           01122028
*PREREQUISITE PREVIOUS MODULES IN ROLE AND STEREOTYPIC BEHAVIOR SOME    01122029
              UNDERSTANDING OF THE ELEMENTARY SCHOOL SETTING, OF THE    01122030
              NATURE OF CHILD DEVELOPMENT AT THIS PERIOD, PREFERABLY    01122031
              BOTH INCLUDING SOME DIRECT OBSERVATION OF THE ELEMENTARY  01122032
              SITUATION.                                                01122033
*EXPERIENCE   DISCUSSION OF THE NATURE AND QUALITY OF ROLES AND         01122011
              STEREOTYPES IN THE ELEMENTARY SCHOOL SETTING.  BY DRAWING 01122012
              IN ALL OF THE PREVIOUS MODULES ON ROLES AND STEREOTYPES,  01122013
              THE INSTRUCTOR SHOULD DIRECT THE DISCUSSION TO WHAT THE   01122014
              STUDENTS EXPECTATIONS OF THE ROLE STRUCTURE OF THE        01122015
              ELEMENTARY SCHOOL ARE.  SPECIAL EMPHASIS SHOULD BE PLACED 01122016
              UPON THE STRUCTURAL CHARACTERISTICS OF ROLES WITHIN THIS  01122017
              SETTING, THE LEGITIMATE AND THE ILLEGITIMATE ROLE DEMANDS,01122018
              TOLERATED AND UNTOLERATED DEVIATION, AND THE IMPORTANCE OF01122019
              THE STUDENTSS OWN INTERACTION WITH ROLE DEMANDS.          01122020
              STEREOTYPES SHOULD BE DISCUSSED IN TERMS OF VALUES TO     01122021
              GROUP INSTRUCTION AND DANGERS IN REGARD TO ANY INDIVIDUAL 01122022
              LEARNING PROBLEM AND ESPECIALLY TO THE TENDENCY TOWARD    01122023
              ETHNOCENTRISM.                                            01122024
*SETTING      SMALL GROUP 21-12 STUDENTS,  COLLEGE                      01122 10
*MATERIALS    BACKGROUND READINGS ON THE ELEMENTARY SCHOOL SETTING      01122  5
*LEVEL        ALL GRADES                                                01122  8
*GENERAL      ALL CANDIDATES                                            01122  7
*HOURS        1                                                         01122  6
*EVALUATION   DEGREE AND QUALITY OF STUDENT PARTICIPATION IN THE        01122034
              DISCUSSION.  LATER EVALUATION OF THE DEGREE TO WHICH      01122035
              STUDENTS CAN UTILIZE THIS INFORMATION AND ITS PRINCIPLES  01122036
              IN MORE COMPLEX TASKS.                                    01122037
*FILE         ROLE  SOCIAL INTERACTION  STEROTYPES                      01122  9
```

```
*OBJECTIVES   TO INTRODUCE EXAMPLES OF ROLE, ROLE SETS, REFERENCE       01123027
              GROUPS, INTERPERSONAL ATTRACTION, INTERPERSONAL CONFLICT, 01123028
              ATTITUDE, BELIEF AND GROUP STRUCTURE AND DEVELOP          01123029
              DISSONANCE ABOUT THE COMPLEXITY OF THE LEARNING SETTING.  01123030
*PREREQUISITE PREVIOUS MODULES ON ROLES AND STEREOTYPES.                01123031
*EXPERIENCE   INTRODUCTION TO PERSONALITY AND SOCIAL ORGANIZATION.  TO  01123011
              INTRODUCE THIS MODULE, THE INSTRUCTOR WILL PROVIDE THE    01123012
              STUDENTS WITH A SOCIOGRAM OF A HYPOTHETICAL CLASSROOM AND 01123013
              THE DESCRIPTIONS OF SEVERAL OF THE REPRESENTED CHILDREN   01123014
              INCLUDING BOTH THE VERY POPULAR AND THE UNPOPULAR.  BASED 01123015
              UPON THE IDEAS DEVELOPED IN THE PREVIOUS MODULES, THE     01123016
              INSTRUCTOR SHOULD ASK THE STUDENTS TO PROJECTIVELY ANALYZE01123017
              AND DESCRIBE THESE CHILDREN AND THEIR RELATIONSHIP TO AND 01123018
              WITHIN THE CLASSROOM.  AS THE DISCUSSION DEVELOPS, THE    01123019
              INSTRUCTOR SHOULD CONTINUALLY FOCUS UPON THE INTERACTION  01123020
              BETWEEN POSSIBLE PERSONALITY AND SOCIAL INTERACTION, AND  01123021
              WHERE POSSIBLE, CREATE COGNITIVE DISSONANCE BETWEEN       01123022
              POTENTIAL SOURCES OF ROLE CONFLICT AND PERSONALITY-ROLE   01123023
              CONFLICT.  AT THE END OF THE PERIOD, THE INSTRUCTOR SHOULD01123024
              BRIEFLY REVIEW THE DISCUSSION AND INTRODUCE THE AREAS TO  01123025
```

```
               BE COVERED IN THE NEXT SERIES OF MODULES.               01123026
*SETTING       SMALL GROUP 21-12 STUDENTS+  COLLEGE                    01123 10
*MATERIALS     A HYPOTHETICAL SOCIOGRAM OF A CLASSROOM AND DESCRIPTIONS 01123  5
               OF BOTH SEVERAL OF THE CHOSEN AND SEVERAL OF THE ISOLATES.01123
               THESE DESCRIPTIONS WOULD INCLUDE PERSONALITY, ACTIVITY,  01123
               BACKGROUND, AND EDUCATIONAL INFORMATION.                01123
*LEVEL         ALL GRADES                                              01123  8
*GENERAL       ALL CANDIDATES                                          01123  7
*HOURS         1                                                       01123  6
*EVALUATION    QUALITY AND DEGREE OF STUDENT PARTICIPATION, LATER      01123032
               EVALUATION OF ATTENTION TO COMPLEXITY OF LEARNING SETTING.01123033
*FILE          ROLE  SOCIAL INTERACTION  SOCIOGRAM                     01123  9
```

```
*OBJECTIVES    TO INTRODUCE AND DEVELOP THE CONCEPTS SURROUNDING MULTIPLE01124029
               ROLES, THE IDEA OF ROLE CONGRUENCE, AND THE SOURCES AND  01124030
               TYPES OF ROLE CONFLICT.                                 01124031
*PREREQUISITE  PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL        01124032
               INTERACTION.                                            01124033
*EXPERIENCE    DISCUSSION OF MULTIPLE ROLES OR THE ROLE SET.  FOCUSING 01124011
               UPON THE PREVIOUS DISCUSSION, THE INSTRUCTOR TAKE       01124012
               DIFFERENT STUDENTKS PROJECTIONS OF A PARTICULAR CHILDSS 01124013
               ROLE AND DEVELOP THE IDEA OF THE ROLE SET.  BASED UPON  01124014
               MERTONSS FORMAL DEFINITIONS DEFINE THE ORGANIZATION AND 01124015
               COORDINATION BETWEEN ROLES AND THEIR RELATIONSHIP TO    01124016
               PERSONALITY.  TOPICS TO BE DEVELOPED WOULD BE ROLE      01124017
               CONGRUENCE, ROLE DISSONANCE AND THE SOURCES OF ROLE     01124018
               CONFLICT.  SPECIFICALLY PAY ATTENTION TO ROLE           01124019
               INCOMPATIBILITY, EXPECTATIONAL INCOMPATIBILITY, ROLE    01124020
               EXPECTATION-PERCEPTION INCOMPATIBILITY, SELFSS ROLE     01124021
               EXPECTATION CONFLICT WITH OTHERSS ROLE ENACTMENT, AND   01124022
               SELFSS ROLE PERCEPTION CONFLICT WITH OTHER NON-ROLE-    01124023
               RELATED ELEMENTS IN STIMULUS FIELD.  INSTRUCTOR SHOULD  01124024
               THEN ASK IF THE STUDENTS CAN GENERATE EXAMPLES FROM EITHER01124025
               THE PREVIOUS DISCUSSION OR FROM PERSONAL EXPERIENCE.  THE 01124026
               INSTRUCTOR SHOULD ALSO RELATE THIS TO THE TEACHING      01124027
               SITUATION.                                              01124028
*SETTING       SMALL GROUP 21-12 STUDENTS+  COLLEGE                    01124 10
*MATERIALS     BLANK                                                   01124  5
*LEVEL         ALL GRADES                                              01124  8
*GENERAL       ALL CANDIDATES                                          01124  7
*HOURS         1/2-1                                                   01124  6
*EVALUATION    MULTIPLE CHOICE EXAM MASTERY ITEMS ON CONTENT, LATER    01124034
               EVALUATION OF INCREASED WILLINGNESS TO INCORPORATE DIVERSE01124035
               CIRCUMSTANCES INTO EDUCATIONAL ANALYSIS AND APPLICATION.  01124036
*FILE          ROLE  SOCIAL INTERACTION  CONGRUENCE                    01124  9
```

```
*OBJECTIVES    TO INTORDUCE THE CONCEPTS AND RELATIONSHIPS BETWEEN ROLE, 01125028
               REFERENT, AND PERSONAL ATTITUDE-VALUING FACTORS AND TO  01125029
               PRE-ORGANIZE FOR DISCUSSION OF SOCIAL VALUING,          01125030
               PARTICULARLY STATUS AND PRESTIGE.                       01125031
*PREREQUISITE  PREVIOUS MODULES ON ROLE, PERSONALITY, AND SOCIAL       01125032
               INTERACTION                                             01125033
*EXPERIENCE    DISCUSSION OF THE ELEMENTS OF SOCIAL SELF-PERCEPTION.  IN 01125011
               THIS MODULE, THE INSTRUCTOR ASKS THE STUDENTS TO WRITE ON 01125012
               A PIECE OF PAPER THE FIRST 20 STATEMENTS THAT COME TO MIND01125013
               BEGINNING WITH [I AM ....[.  UPON COMPLETING THIS EXERCISE01125014
               THE INSTRUCTOR SHOULD BEGIN DISCUSSION BY HAVING THE CLASS01125015
               HELP HIM DEVELOP CATEGORIES UNDER WHICH THESE RESPONSES 01125016
               WOULD FALL.  THE MAJOR CATEGORIES WHICH SHOULD APPEAR IN  01125017
```

```
                ORDER WILL BE ROLE DESCRIPTIONS, REFERENT DESCRIPTIONS,   01125018
                AND GLOBAL PERCEPTIVE-ATTITUDINAL DESCRIPTIONS.  OUT OF   01125019
                THIS PROCESS, THE INSTRUCTOR SHOULD DIRECT DISCUSSION TO  01125020
                WHY THESE CATEGORIES APPEAR AND PARTICULARLY WHY THEY     01125021
                SHOULD BE GENERALLY ORDERED BY RANK OF APPEARANCE THE WAY 01125022
                THEY ARE.  THE RELATIONSHIP BETWEEN ROLE CENTRALITY,      01125023
                REFERENT POSITION AND ATTITUDE-VALUING ORGANIZATION SHOULD01125024
                BE POINTED OUT.  STUDENTS SHOULD THEN BE DIRECTED TO      01125025
                DISCUSSION OF WHY THE ORDER IN RELATION TO PERSONALITY    01125026
                WOULD BE INVERTED.                                        01125027
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01125 10
*MATERIALS      BLANK                                                     01125  5
*LEVEL          ALL GRADES                                                01125  8
*GENERAL        ALL CANDIDATES                                            01125  7
*HOURS          1/2-1                                                     01125  6
*EVALUATION     MULTIPLE-CHOICE EXAMINATION OVER CONCEPTS AND             01125034
                RELATIONSHIPS, LATER EVALUATION OF ABILITY AND WILLINGNESS01125035
                TO ANALYZE AND APPLY CONCEPTS AND PRINCIPLES.             01125036
*FILE           ROLE  REFERENT  ATTITUDE VALUING FACTORS                  01125  9
```

```
*OBJECTIVES     TO INTRODUCE AND DEFINE THE CONCEPT OF REFERENT, POINT OF 01126029
                REFERENCE AND REFERENCE GROUP AND DEVELOP EXAMPLES FROM   01126030
                THE STUDENTSS OWN EXPERIENCES.                            01126031
*PREREQUISITE   PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL          01126032
                INTERACTION                                               01126033
*EXPERIENCE     DISCUSSION OF REFERENT, POINT OF REFERENCE AND REFERENCE  01126011
                GROUP.  BEGIN BY ASKING THE STUDENTS TO IDENTIFY AND      01126012
                DESCRIBE SEVERAL DIFFERENT GROUPS ON CAMPUS ≥SUCH AS THE  01126013
                FRATERNITY, THE ATHLETES, THE (HIPPIES), ETC.+.  AS       01126014
                DISTINGUISHING CHARACTERISTICS ARE SUGGESTED, DIRECT THE  01126015
                DISCUSSION TOWARD CATEGORIZING THESE CHARACTERISTICS.  AS 01126016
                ROLE CONCEPTIONS PROVE INADEQUATE DIRECT THE DISCUSSION   01126017
                TOWARD BEHAVIORAL REFERENTS AND DIFFERENTIATE BETWEEN     01126018
                REFERENTS AND ROLE PERFORMANCE-EXPECTATIONS.  AS THIS     01126019
                DISTINCTION PROGRESSES DIRECT DISCUSSION TOWARD THE       01126020
                SOCIALIZATION PROCESS OF ACQUIRING THESE REFERENT         01126021
                CHARACTERISTICS, ESPECIALLY THE IDEA OF MODELING AND      01126022
                DEVELOPING BEHAVIORAL PATTERNS CONSISTENT WITH THE        01126023
                REFERENT SOURCE.  INCLUDED IN THE DISCUSSION SHOULD BE THE01126024
                FORMAL DISTINCTIONS OF REFERENT GROUPS: 1+ GROUPS WHICH   01126025
                SERVE AS COMPARISON POINTS, 2+ GROUPS TO WHICH INDIVIDUALS01126026
                ASPIRE, AND 3+ GROUPS WHOSE PERSPECTIVES ARE ASSUMED BY   01126027
                THE INDIVIDUAL.                                           01126028
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01126 10
*MATERIALS      BLANK                                                     01126  5
*LEVEL          ALL GRADES                                                01126  8
*GENERAL        ALL CANDIDATES                                            01126  7
*HOURS          1                                                         01126  6
*EVALUATION     MULTIPLE-CHOICE EXAMINATION OVER CONTENT, LATER EVALUATION01126034
                OF ABILITY TO USE CONCEPTS IN ANALYSIS AND APPLICATION IN 01126035
                A PROJECTED OR REAL EDUCATIONAL SETTING.                  01126036
*FILE           ROLE  SOCIAL INTERACTION  REFERENCE GROUPS                01126  9
```

```
*OBJECTIVES     TO GENERALIZE THE CONCEPTS INVOLVED IN ROLE, PERSONALITY  01127035
                AND SOCIAL INTERACTION INTO THE DEVELOPMENTAL FRAMEWORK   01127036
                AND APPLY TO THESE CONCEPTS THE OUTLINE OF THE PRINCIPLES 01127037
                OF THEIR DEVELOPMENT.                                     01127038
*PREREQUISITE   PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL          01127039
                INTERACTION.                                              01127040
```

```
*EXPERIENCE    BEGINNING THE GENERALIZATION OF SOCIAL LEARNING:  THE      01127011
               FORMATION OF ATTITUDE AND BELIEF.  BY THIS MODULE IT IS   01127012
               TIME TO HELP THE STUDENTS ANSWER THE QUESTION OF WHAT THE 01127013
               PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL          01127014
               INTERACTION MEAN TO THEM AND TO THE EDUCATIONAL SITUATION 01127015
               IN WHICH THEY EXPECT TO FIND THEMSELVES IN THE FUTURE.    01127016
               THE INSTRUCTOR SHOULD BEGIN BY BRIEFLY REVIEWING THE      01127017
               CONCEPTUAL FRAMEWORK OF DEVELOPMENT ≥THE DEVELOPMENT OF   01127018
               INCREASINGLY COMPLEX FORMS+ DRAWING IN THE                01127019
               INTERRELATIONSHIP OF BIOLOGICAL, PHYSIOLOGICAL, COGNITIVE 01127020
               AND SOCIAL DEVELOPMENT AS THEY INTERACT IN THE            01127021
               ASSIMILATION-ACCOMODATION PROCESS AND THEN RETURN BRIEFLY 01127022
               TO PIAGET≤S IDEAS OF MORAL DEVELOPMENT.  POSE SOME OF THE 01127023
               MORAL PROBLEMS THEY CONFRONT AT EARLY AGES AND ASK FROM A 01127024
               SPECIFIC EXAMPLE WHAT THE PARTICULAR MORAL POSTURE OF THE 01127025
               CHILD MEANS TO HIS INTERACTION WITH ENVIRONMENT, AND THEN 01127026
               WHY IT CHANGES OVER TIME.  THIS SHOULD LEAD TO THE        01127027
               DISCUSSION OF THE BROADENING ROLE ASSUMPTION OF THE CHILD 01127028
               AND WITH INCREASED EXPOSURE, THE BROADENING REFERENT BASE.01127029
               ASK WHY IT IS THAT THERE USUALLY APPEARS A CONSISTENCY IN 01127030
               PATTERN ALTHOUGH THE COGNITIVE STRUCTURE OF DEALING WITH  01127031
               ENVIRONMENT CHANGES.  FINISH BY DRAWING TOGETHER THE IDEAS01127032
               OF THE PREVIOUS MODULES INTO THIS FRAMEWORK OF SOCIAL     01127033
               LEARNING AND DEVELOPMENT.                                 01127034
*SETTING       LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE          01127 10
*MATERIALS     BLANK                                                     01127  5
*LEVEL         ALL GRADES                                                01127  8
*GENERAL       ALL CANDIDATES                                            01127  7
*HOURS         1                                                         01127  6
*EVALUATION    BLANK                                                     01127041
*FILE          ROLE  ATTITUDE + BELIEF FORMULATION  SOCIAL INTERACTION   01127  9
```

```
*OBJECTIVES    TO DEVELOP THE CONCEPTS WITHIN DEVELOPMENTAL CONTEXT OF   01128028
               THE FUNCTIONS OF ATTITUDES.                               01128029
*PREREQUISITE  PREVIOUS MODULES IN ROLE, PERSONALITY AND SOCIAL          01128030
*EXPERIENCE    CONTINUATION OF THE FORMATION OF ATTITUDE AND BELIEF.     01128011
               FROM THE PREVIOUS EXAMPLES PROVIDED IN HOLT≤S WHY CHILDREN01128012
               FAIL, THE INSTRUCTOR SHOULD CHOSE AN EXAMPLE OF A CHILD≤S 01128013
               EXHIBITED ATTITUDE AND ASK THE STUDENTS TO SUGGEST WHY THE01128014
               CHILD MIGHT HOLD THAT PARTICULAR ATTITUDE.  AS THE        01128015
               DISCUSSION DEVELOPS, DRAW IN FIRST THE IDEA OF            01128016
               DEVELOPMENTAL ADAPTATION AND THE USE OF ATTITUDES TO      01128017
               ACCOMODATE THEIR ENVIRONMENT, AND SPECIFICALLY TO POINT   01128018
               OUT THE FUNCTIONAL PURPOSE OF ATTITUDES.  IN WORKING WITH 01128019
               THIS DISCUSSION, AS THE EXAMPLES ARISE, INTRODUCE THE FOUR01128020
               MAJOR FUNCTIONS WHICH ATTITUDES PERFORM FOR THE           01128021
               INDIVIDUAL: 1+ THE INSTRUMENTAL, ADJUSTIVE OR UTILITARIAN 01128022
               FUNCTION, 2+ THE EGO-DEFENSIVE FUNCTION, 3+ THE VALUE     01128023
               EXPRESSIVE FUNCTION AND 4+ THE KNOWLEDGE FUNCTION.  AS THE01128024
               FUNCTIONS BECOME DEFINED, ATTEMPT TO DIRECT THE STUDENTS  01128025
               BACK TO EXAMPLES THEY EXPECT WOULD REPRESENT THE          01128026
               ELEMENTARY CHILD≤S POSITION.                              01128027
*SETTING       LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE          01128 10
*MATERIALS     EXAMPLES OF CHILDREN≤S ATTITUDINAL ORGANIZATION FROM      01128  5
               HOLT≤S WHY CHILDREN FAIL.                                 01128
*LEVEL         ALL GRADES                                                01128  8
*GENERAL       ALL CANDIDATES                                            01128  7
*HOURS         1                                                         01128  6
               INTERACTION                                               01128031
*EVALUATION    SAME AS 1132                                              01128032

*FILE          ROLE  SOCIAL INTERACTION  ATTITUDES                       01128  9
```

```
*OBJECTIVES   TO DEVELOP THE NOTION OF ATTITUDE AS RESPONSE SET TO       01129029
              STIMULUS IN PERCEPTUAL FIELD AND BELIEF SYSTEM AS THE      01129030
              UNDERLYING STRUCTURAL ORGANIZATION.  TO DEVELOP THE THEORY01129031
              OF ROKEACHSS MODEL OF BELIEF SYSTEMS AND TO INTEGRATE THIS01129032
              MODEL WITH THE PIAGETIAN MODEL OF DEVELOPMENT.             01129033
*PREREQUISITE PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL           01129034
              INTERACTION.                                               01129035
*EXPERIENCE   CONTINUATION OF THE FORMATION OF ATTITUDE AND BELIEF.      01129011
              BEGIN BY INTRODUCING ATTITUDE AS THE RESPONSE FORM TO      01129012
              STIMULUS ACTIVE IN THE INDIVIDUALSS PERCEPTIVE FIELD.      01129013
              THIS BEING THE CASE, THEN ASK THE STUDENTS FROM WHENCE THE01129014
              ATTITUDES CAME.  USING EXAMPLE DERIVED FROM PREVIOUS       01129015
              DISCUSSION, ASK THE STUDENTS TO ATTEMPT TO DERIVE THE      01129016
              NATURE OF THE UNDERLYING STRUCTURE FROM WHICH A PARTICULAR01129017
              ATTITUDE TO A SPECIFIC SET OF STIMULUS WOULD ARISE.  AS    01129018
              THIS DISCUSSION PROGRESSES, BEGIN TO FEED IN THE ROKEACH   01129019
              ORGANIZATION AND MODIFICATION OF BELIEFS MODEL.  PAY       01129020
              PARTICULAR ATTENTION TO THE LEVEL OF BELIEFS ZPRIMITIVE,   01129021
              AUTHORITY AND PERIPHERAL+ AND HOW THEY DEVELOP.  ADD TO    01129022
              THIS HOW ROKEACH PERCEIVES THE MODIFICATION OF A BELIEF    01129023
              SYSTEM AND MAKE THIS THEORY PARSIMONIOUS TO THE PIAGETIAN 01129024
              MODEL OF DEVELOPMENT.  FINISH BY DIRECTING STUDENTS        01129025
              ATTENTION AND DISCUSSION BACK TO THE PROBABLE ROLE THIS    01129026
              PLAYS IN THE CHILD OF ELEMENTARY SCHOOL AGE AND INTEGRATE  01129027
              THESE IDEAS WITH THE CHILDS ROLES AND REFERENTS.           01129028
*SETTING      LARGE GROUP  SMALL GROUP >1-15 STUDENTS+  COLLEGE          01129 10
*MATERIALS    BLANK                                                      01129  5
*LEVEL        ALL GRADES                                                 01129  8
*GENERAL      ALL CANDIDATES                                             01129  7
*HOURS        1                                                          01129  6
*EVALUATION   SAME AS 1132                                               01129036
*FILE         ROLE  SOCIAL INTERACTION  PERCEPTION                       01129  9
```

```
*OBJECTIVES   TO DEVELOP THE CONCEPTS INHERENT WITHIN SOCIAL             01130032
              LEARNING--ACQUISITION OF BEHAVIOR THROUGH OBSERVATION,     01130033
              IMITATION, THE ROLE OF REWARD OF REINFORCEMENT, THE EFFECT01130034
              OF NEGATIVE REINFORCEMENT OR REWARD.                       01130035
              PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL           01130036
              INTERACTION                                                01130037
*EXPERIENCE   DISCUSSION OF SOCIAL LEARNING.  BEGIN BY ASKING HOW MANY   01130011
              OF THE STUDENTS DURING THEIR EDUCATION WERE AT SOMETIME    01130012
              INVOLVED IN A NEBULOUS PROCEDURE CALLED CITIZENSHIP        01130013
              TRAINING.  ASK THOSE THAT RESPOND TO DESCRIBE AS WELL AS   01130014
              THEY CAN WHAT CONSTITUTED THIS PROCEDURE AND WHAT THEY     01130015
              THOUGHT IT WAS SUPPOSED TO DO.  AS THE EXAMPLES DEVELOP,   01130016
              BEGIN DIRECTING THEM TO THE LEARNING AND DEVELOPMENT       01130017
              FUNCTIONS INVOLVED IN THIS PROCEDURE, ESPECIALLY TO THE    01130018
              IDEA OF TRAINING.  DEVELOP THE CONCEPTUAL FRAMEWORK OF     01130019
              TRAINING AND OTHER FORMS OF SOCIAL LEARNING, BOTH          01130020
              ORGANIZED AND NON-ORGANIZED AS THE SOCIAL INCULCATION      01130021
              PROCESS.  LEARNING ELEMENTS TO BE DEVELOPED AND DISCUSSED 01130022
              WOULD BE THE ACQUISITION OF NEW RESPONSES THROUGH          01130023
              OBSERVATIONAL TRAINING, PLAY BEHAVIOR AND NON-THREAT       01130024
              ACQUISITION OF BEHAVIORS, THE ROLE OF REWARD AND           01130025
              REINFORCEMENT, AND THE ROLE OF NON-REWARD, SACTIONS,       01130026
              PUNISHMENT, OR LACK OF REINFORCEMENT.  CONSTANTLY HAVE THE01130027
              STUDENTS GENERATE EXAMPLES FROM THERE OWN EXPERIENCE OF    01130028
```

```
                THESE CONCEPTS.  PAY PARTICULAR ATTENTION TO THE CONCEPT  01130029
                OF IMITATION AS THE MEANS TO ACQUIRING NEW BEHAVIORAL     01130030
                REPETOIRES.                                               01130031
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                      01130 10
*MATERIALS      BLANK                                                     01130  5
*LEVEL          ALL GRADES                                                01130  8
*GENERAL        ALL CANDIDATES                                            01130  7
*HOURS          1-2                                                       01130  6
*EVALUATION     SAME AS 1132                                              01130038
*FILE           ROLE  SOCIAL LEARNING  SOCIAL INTERACTION                 01130  9
```

```
*OBJECTIVES     TO DEVELOP THE CONCEPTS, CHARACTERISTICS, AND INTERACTION 01131029
                OF SOCIAL GROUP STRUCTURE.                                01131030
*PREREQUISITE   PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL          01131031
                INTERACTION                                               01131032
*EXPERIENCE     DISCUSSION OF THE SOCIAL ORGANIZATION OF THE CLASSROOM.   01131011
                RETURNING TO THE SOCIO-GRAM INTRODUCED IN A PREVIOUS      01131012
                MODULE, THE INSTRUCTOR SHOULD ASK THE STUDENTS TO DESCRIBE01131013
                THE COLLECTIVE NATURE OF THE HYPOTHETICAL CLASSROOM SHOWN.01131014
                AS THIS DEVELOPS, THE INSTRUCTOR SHOULD DIRECT QUESTIONS  01131015
                CONCERNING THE FOLLOWING FACTORS: 1† THE BASIC DYNAMICS   01131016
                WHICH MIGHT SHAPE THE INSTRUCTIONAL GROUP, 2† THE         01131017
                DEMENSIONS WHICH MIGHT SHAPE THE RELATIONSHIPS AMONG CLASS01131018
                MEMBERS, 3† THE EFFECT GROUP STRUCTURE MIGHT HAVE UPON    01131019
                PARTICIPATION BOTH MOMENTARY AND SUSTAINED, 4† THE EFFECT 01131020
                OF GROUP STRUCTURE ON PROBLEM-SOLVING AND WORK            01131021
                RELATIONSHIPS, 5† HOW THE GROUP STRUCTURE MIGHT EFFECT THE01131022
                DISTRIBUTION OF REWARDS OR GRATIFICATIONS, AND 6† HOW THE 01131023
                GROUP STRUCTURE MIGHT EFFECT THE DEVELOPMENT OF ATTITUDES,01131024
                REFERENTS AND NORMS.  AS THE STUDENTS BEGIN TO ACQUAINT   01131025
                THEMSELVES WITH DEALING WITH THE EXAMPLES OF THESE        01131026
                CONCEPTS, BRING IN THE MORE FORMAL DEVELOPMENT AND        01131027
                DEFINITION OF THEM.                                       01131028
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                      01131 10
*MATERIALS      SOCIOGRAM OF A HYPOTHETICAL ELEMENTARY CLASSROOM FROM A   01131  5
                PREVIOUS MODULE.                                          01131
*LEVEL          ALL GRADES                                                01131  8
*GENERAL        ALL CANDIDATES                                            01131  7
*HOURS          1                                                         01131  6
*EVALUATION     SAME AS 1132                                              01131033
*FILE           ROLE  SOCIAL GROUP STRUCTURE  CLASSROOM ORGANIZATION      01131  9
```

```
*OBJECTIVES     TO INITIATE AN ATTITUDINAL SET TOWARD THE CONCEPTION OF   01132037
                THE CLASSROOM AS A ORGANIZATION, AND TO PROVIDE A         01132038
                GENERALIZED SETTING FOR THE CONTENT OF PREVIOUS MODULES.  01132039
*PREREQUISITE   PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL          01132040
                INTERACTION.                                              01132041
*EXPERIENCE     DISCUSSION OF THE CLASSROOM AS AN ORGANIZATION.  THIS     01132011
                MODULE DEMANDS A MASTERFUL TEACHING TOUCH IN THAT ITS     01132012
                PRIMARY PURPOSE IS TO FOSTER WITHIN THE STUDENTS THROUGH  01132013
                THERE OWN INTUITION THE CONCEPTION OF THE CLASSROOM AS    01132014
                MORE THAN A RAMPANT, BLOSSOMING COLLECTION OF LITTLE IDS, 01132015
                EGOS, AND ANIMALS PURSUING A SERIES OF T-MAZES.  IN       01132016
                ESSENCE THE IDEA IS THAT THE CLASSROOM IS MORE ANALOGOUS  01132017
                TO OTHER FORMS OF FORMAL ORGANIZATION SUCH AS BUSINESS,   01132018
                THE MILITARY, GOVERNMENT, THE CHURCH, THAN IT IS TO THE   01132019
                PICTURE OF SOCRATES SITTING UNDER A TREE SURROUNDED BY HIS01132020
                HIS ADMIRING PUPILS.  THE CONTENT AND DISCUSSION CANNOT   01132021
                COME OFF AS A SERIES OF LINES ON AN ORGANIZATIONAL CHART, 01132022
                BUT IT MUST IMPLY THAT THE TEACHER IS DEALING WITH GROUPS 01132023
                OF PEOPLE IN SOCIAL CIRCUMSTANCE IN AN ORGANIZATIONAL     01132024
                SETTING FOR THE ACCOMPLISHMENT OF CERTAIN DEFINED AND     01132025
                OTHER UNDEFINED OR UNKNOWN PURPOSES.  THE INSTRUCTOR      01132026
                SHOULD PROBABLY BEGIN BY REVIEWING BRIEFLY THE PAST       01132027
                MODULES AND THEN ASKING THE STUDENTS INLIGHT OF THIS      01132028
                PERSPECTIVE TO ATTEMPT TO DEFINE THE CLASSROOM, AND THEN  01132029
                TO DEFINE THE TEACHER.  THE FOCUS SHOULD BE ON DEVELOPING 01132030
                THE CONCEPTION OF PLANNED PURPOSEFUL ACTS AND CAPITALIZING01132031
                ON FORTUITOUS EVENTS TO ACCOMPLISH CERTAIN EDUCATIONAL    01132032
                OBJECTIVES.  THE SESSION SHOULD END BY ASSIGNING KATZ≤S   01132033
                THE MOTIVATIONAL BASIS OF ORGANIZATIONAL BEHAVIOR FOR     01132034
                CONSIDERATION OF ITS APPLICATION TO THE EDUCATIONAL       01132035
                SETTING.                                                  01132036
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01132 10
*MATERIALS      ASSIGNED READING:  KATZ≤S THE MOTIVATIONAL BASIS OF       01132  5
                ORGANIZATIONAL BEHAVIOR.                                  01132
*LEVEL          ALL GRADES                                                01132  8
*GENERAL        ALL CANDIDATES                                            01132  7
*HOURS          1                                                         01132  6
*EVALUATION     LEVEL AND QUALITY OF STUDENT PARTICIPATION, EVALUATION OF 01132042
                THE INSTRUCTOR IN DIRECTING THE DISCUSSION TOWARD CERTAIN 01132043
                ATTITUDINAL AND CONCEPTUAL PERSPECTIVES.                  01132044
*FILE           ROLE  CLASSROOM ORGANIZATION  SOCIAL INTERACTION          01132  9
```

```
*OBJECTIVES     TO APPLY THE CONCEPTS AND PRINCIPLES OF ORGANIZATIONAL    01133035
                STRUCTURE AND BEHAVIOR TO THE ELEMENTARY CLASSROOM, AND TO01133036
                BEGIN TO DEVELOP THE IDEA OF THE TEACHER AS ORGANIZATIONAL01133037
                LEADER.                                                   01133038
*PREREQUISITE   PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL          01133039
                INTERACTION+ KATZ≤S THE MOTIVATIONAL BASIS OF             01133040
                ORGANIZATIONAL BEHAVIOR.                                  01133041
*EXPERIENCE     CONTINUED DISCUSSION OF THE CLASSROOM AS AN ORGANIZATION. 01133011
                BASED UPON THE ASSIGNED READING FROM THE PREVIOUS MODULE, 01133012
                KATZ≤S THE MOTIVATIONAL BASIS OF ORGANIZATIONAL BEHAVIOR, 01133013
                ASK THE STUDENTS TO ATTEMPT TO DRAW THE PARALLELS FROM    01133014
                KATZ≤S POSITION TO THE ELEMENTARY CLASSROOM.  THE         01133015
                INSTRUCTOR MUST CONSTANTLY MONITOR THE DISCUSSION TO      01133016
                MODIFY THE PARALLEL TO INCLUDE PREVIOUS INFORMATION FROM  01133017
                THE LEARNING AND DEVELOPMENT MODULES IN ORDER TO          01133018
                ACCOMODATE THE IDEAS TO THE ELEMENTARY CHILD.  SPECIFIC   01133019
                ATTENTION SHOULD BE PAID TO THE BEHAVIORAL REQUIREMENTS OF01133020
                ATTRACTING AND HOLDING PEOPLE IN A SYSTEM ≥ATTENDANCE AND 01133021
                PARTICIPATION+, OF DEPENDABLE ROLE PERFORMANCE, OF        01133022
                INNOVATIVE AND SPONTANEOUS BEHAVIOR, OF PROTECTION, OF    01133023
                CONSTRUCTIVE IDEAS AND SELF-TRAINING, OF FAVORABLE        01133024
                ATTITUDE, AND THEN, TO THE ORGANIZATIONAL MOTIVATIONAL    01133025
                PATTERNS INCLUDING CONSEQUENCES AND CONDITIONS SUCH AS    01133026
                COMPLIANCE WITH LEGITIMIZED RULES, CONDITIONS CONDUCIVE TO01133027
                REWARDS, INTRINSIC JOB SATISFACTION, INTERNALIZATION OF   01133028
                REWARDS, INSRINSIC JOB SATISFACTION, INTERNALIZATION OF   01133029
                ORGANIZATIONAL GOALS AND VALUES, AND SOCIAL SATISFACTION  01133030
                FROM PRIMARY-GROUP RELATIONSHIPS.  TO A LARGE DEGREE, THE 01133031
                TASK IS DRAWING EQUIVALANCE RELATIONSHIPS BETWEEN         01133032
                TERMINOLOGY.  FINISH BY REASKING THE QUESTION OF WHAT AND 01133033
                WHO THE TEACHER IS WITHIN THIS STRUCTURE.                 01133034
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01133 10
*MATERIALS      BLANK                                                     01133  5
*LEVEL          ALL GRADES                                                01133  8
*GENERAL        ALL CANDIDATES                                            01133  7
```

```
*HOURS          1-2                                                   01133  6
*EVALUATION     HAVE THE STUDENTS VIEW A VIDEO-TAPE OF A CLASSROOM SETTING01133042
                2SUCH AS ONE OF KOUNINSS TAPES USED IN HIS STUDY OF   01133043
                CLASSROOM MANAGEMENT* AND HAVE STUDENTS ANALYZE THE   01133044
                CLASSROOM ORGANIZATION AND THEN SUGGEST MORE APPROPRIATE 01133045
                MEANS OF ORGANIZATION.                                01133046
*FILE           ROLE  ORGANIZATIONAL STRUCTURE  CLASSROOM BEHAVIOR    01133  9
```

```
*OBJECTIVES     TO CONTINUE THE GENERALIZATION OF ORGANIZATION CONCEPTS TO01134029
                THE ELEMENTARY CLASSROOM AND TO FOCUS ON THE FACTORS OF  01134030
                CLASSROOM MANAGEMENT AND THE ROLE OF THE TEACHER IN   01134031
                CREATING AND DEVELOPING THE STRUCTURAL CHARACTERISTICS.  01134032
*PREREQUISITE   PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL      01134033
                INTERACTION.                                          01134034
*EXPERIENCE     DISCUSSION OF CLASSROOM MANAGEMENT.  DRAWING FROM THE 01134011
                CONCEPTUAL PARALLELS OF THE CLASSROOM AS AN ORGANIZATION 01134012
                DEVELOPED IN THE PREVIOUS MODULE.  BEGIN BY DISCUSSION OF 01134013
                THE ROLE STRUCTURE OF THE CLASSROOM, THE LIMITS OF    01134014
                TOLURATED DEVIATION, FLEXIBILITY WITHIN THOSE LIMITS, THE 01134015
                APPLICATION OF POSITIVE AND NEGATIVE REINFORCEMENT RELATED01134016
                TO THE LIMITS OF TOLURATED DEVIATION, AND MEANS TO THE  01134017
                INTERNALIZATION OF ORGANIZATIONAL GOALS AND VALUES.  PAY 01134018
                PARTICULAR ATTENTION TO THE IDEA OF THE LIMITS OF     01134019
                TOLURATED DEVIATION AND THE EFFECT THE WIDENING OR    01134020
                NARROWING OF THESE LIMITS WILL HAVE ON BEHAVIOR IN THE  01134021
                CLASSROOM.  WHEN THIS IS CARRIED AS FAR AS PRODUCTIVELY 01134022
                POSSIBLE WITHOUT LEADERSHIP CONDITIONS, INTRODUCE THE  01134023
                TEACHER AS A LEADER, FIRST BY IMPOSITION OF THE SYSTEM. 01134024
                AND ASK HOW A TEACHER GOES ABOUT LEGITIMATIZING HER   01134025
                AUTHORITY.  AS THIS DEVELOPS DIRECT THE DISCUSSION TO 01134026
                NATURAL RELATIONSHIPS WITH THE PREVIOUSLY DISCUSSED   01134027
                STRUCTURAL CHARACTERISTICS.                           01134028
*SETTING        SMALL GROUP 21-12 STUDENTS*  COLLEGE                  01134 10
*MATERIALS      BLANK                                                 01134  5
*LEVEL          ALL GRADES                                            01134  8
*GENERAL        ALL CANDIDATES                                        01134  7
*HOURS          1                                                     01134  6
*EVALUATION     PROVIDE STUDENTS WITH CLASS SETTINGS WHICH FOCUS ON   01134035
                TEACHER MANAGEMENT BEHAVIORS.  STUDENTS ARE TO ANALYZE 01134036
                WHAT THE STRUCTURAL CHARACTERISTICS OF THE CLASSROOM MIGHT01134037
                BE, SUGGEST PROBABLE RESULTING STUDENT BEHAVIOR, AND  01134038
                SUGGEST CHANGES IN TEACHER BEHAVIOR FOR CERTAIN       01134039
                OBJECTIVES.  2SEE LATER MODULE*                       01134040
*FILE           ROLE  ORGANIZATION CONCEPTS  CLIMATE DEVELOPMENT      01134  9
```

```
*OBJECTIVES     PROVIDE STUDENTS WITH ACTUAL EXAMPLES OF DISRUPTIVE OR  01135023
                DEVIANT BEHAVIOR IN THE CLASSROOM AS WELL AS INFORMATION 01135024
                AND EXAMPLES OF HOW THIS BEHAVIOR DEVELOPS AND VARIOUS  01135025
                STRATEGIES FOR ITS CONTROL AND ALTERATION.            01135026
*PREREQUISITE   PREVIOUS MODULES ON REINFORCEMENT, TEACHER-INITIATED  01135027
                INTERACTION, AND TEACHER RESPONSE BEHAVIOR.           01135028
*EXPERIENCE     ANALYSIS AND DISCUSSION OF DEVIANT STUDENT BEHAVIOR.  01135011
                EXAMPLES OF DEVIANT BEHAVIOR SHOWN FROM A FILM.       01135012
                DISCUSSION SHOULD FOCUS ON THE NATURE, AND ADEQUACY AND  01135013
                INADEQUACY OF BOTH TEACHER INITIATED BEHAVIOR AND TEACHER 01135014
                INITIATED BEHAVIOR AND TEACHER RESPONSE BEHAVIOR,     01135015
                INSTRUCTOR SHOULD FOCUS ON THE PROPER AND IMPROPER USES OF01135016
                REINFORCEMENT AND DIRECT STUDENT DISCUSSION TO HOW SHOULD 01135017
                SITUATIONS COULD BE AVOIDED AND HOW THE STUDENT BEHAVIOR  01135018
```

```
               SHOULD OR MIGHT BE ALTERED.  DISCUSSION SHOULD VARY        01135019
               ACCORDING TO AGE LEVEL AT WHICH STUDENTS INTEND TO TEACH   01135020
               DRAWING FROM CONTROL AND ALTERATION OF DEVIANT BEHAVIOR    01135021
               MOST PREVALENT AT THAT AGE LEVEL.                          01135022
*SETTING       SMALL GROUP 21-12 STUDENTS+  COLLEGE                       01135 10
*MATERIALS     ACTUAL IN CLASSROOM FILMS OF STUDENT DEVIANT BEHAVIOR      01135  5
               2SUCH AS THOSE PRODUCED BY JACOB KOUNIN+                   01135
*LEVEL         ALL GRADES                                                 01135  8
*GENERAL       ALL CANDIDATES                                             01135  7
*HOURS         1                                                          01135  6
*EVALUATION    BRIEF STUDENT PAPER ANALYZING ONE EXAMPLE OF DEVIANT       01135029
               STUDENT BEHAVIOR INCLUDING SUGGESTIONS FOR ALTERATION OF   01135030
               THAT BEHAVIOR.                                             01135031
*FILE          ROLE  DEVIANT BEHAVIOR  SOCIAL INTERACTION                 01135  9
```

```
*OBJECTIVES    TO PRACTICE APPLYING THE CONCEPTS OF CLASSROOM             01136026
               ORGANIZATION AND CLASSROOM MANAGEMENT TO SPECIFIC          01136027
               EXAMPLES -- TO CONTINUE TO BUILD SKILLS IN ANALYSIS AND    01136028
               PROBLEM-SOLVING IN THE EDUCATIONAL SETTING.                01136029
*PREREQUISITE  MODULES ON ROLE, PERSONALITY AND SOCIAL INTERACTION.       01136030
*EXPERIENCE    STUDENT PROJECT ON CLASSROOM MANAGEMENT.  THE INSTRUCTOR   01136011
               PROVIDES EACH STUDENT WITH A DESCRIPTION AND DISCUSSION OF01136012
               THREE DIFFERENT TEACHERS, ONE VERY RIGID BUT CONSISTENT,   01136013
               ANOTHER VERY FLEXIBLE BUT CONSISTENT, AND ANOTHER VERY     01136014
               FLEXIBLE BUT IN CONSISTENT.  THE STUDENTS ARE THEN         01136015
               DIRECTED TO CONSIDER EACH TEACHER INDEPENDENTLY AND WRITE  01136016
               A PAPER DEVELOPING THE FOLLOWING THEMES: 1+ WHAT           01136017
               STRUCTURAL CHARACTERISTICS CAN YOU PROJECT FROM THE        01136018
               DESCRIPTION OF EACH TEACHER, 2+ WHAT WOULD BE THE PROBABLE01136019
               RESULTING STUDENT BEHAVIOR PATTERNS AS PART OF THAT        01136020
               STRUCTURE 2PAYING PARTICULAR ATTENTION TO DEVIANCY+, AND   01136021
               3+ SUGGEST SEVERAL CLASSROOM OBJECTIVES AND THEN DISCUSS    01136022
               HOW EACH TEACHERS BEHAVIOR AND PROJECTED CLASSROOM         01136023
               STRUCTURE MIGHT BE ALTERED TO BEST ACCOMPLISH THOSE        01136024
               OBJECTIVES.                                                01136025
*SETTING       INDEPENDENT  COLLEGE                                       01136 10
*MATERIALS     DESCRIPTIONS OF THREE TEACHERS INCLUDING PERSONALITY,      01136  5
               GENERAL BEHAVIORAL, AND CLASSROOM BEHAVIORAL, AND          01136
               CLASSROOM BEHAVIORAL CHARACTERISTICS.                      01136
*LEVEL         ALL GRADES                                                 01136  8
*GENERAL       ALL CANDIDATES                                             01136  7
*HOURS         5-10                                                       01136  6
*EVALUATION    PAPERS WILL BE EVALUATED ACCORDING TO CRITERION OF         01136031
               CORRECTNESS OF ANALYSIS AND PROJECTION, COMPLETENESS OF    01136032
               PROJECTIONS, INTERNAL CONSISTENCY BETWEEN ANALYSIS,        01136033
               BEHAVIORAL CONCOMITANTS, AND SUGGESTED CHANGES, AND        01136034
               WILLINGNESS TO APPLY CONCEPTUAL FRAMEWORK.                 01136035
*FILE          ROLE  STRUCTURE OF CLASSROOM  SOCIAL INTERACTION           01136  9
```

```
*OBJECTIVES    TO GENERALIZE PREVIOUS CONCEPTS AND PRINCIPLES INTO THE    01137031
               SPECIFIC AREA OF LEARNING MANAGEMENT--TO INTRODUCE THE     01137032
               DEFINITIVE PARTS OF A LEARNING OBJECTIVE AND TO CONTINUE   01137033
               TO DEVELOP SKILLS OF ANALYSIS AND PROBLEM-SOLVING.         01137034
*PREREQUISITE  PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL           01137035
               INTERACTION.                                               01137036
*EVALUATION    EVALUATION OF LEVEL AND QUALITY OF PARTICIPATION AND LATER01137037
*EXPERIENCE    DISCUSSION OF THE MANAGEMENT OF LEARNING.  THIS MODULE     01137011
               SHOULD CONSIDER THE FOLLOWING AREAS: 1+ THE NATURE OF A    01137012
               LEARNING OBJECTIVE--ITS DESCRIPTION, LEVEL, PREREQUISITE   01137013
```

```
                LEARNING AND GENERALIZATION, 2+ IS IT PROCESS, CONTENT OR 01137014
                BOTH, 3+ THE DEGREE OF VARIATION POSSIBLE IN MEANS OF ITS 01137015
                ACCOMPLISHMENT, 4+ IIS INHERENT AND POTENTIAL MOTIVATIONAL01137016
                QUALITIES, AND 5+ MEANS OF EVALUATION OF MASTERY OF THE   01137017
                OBJECTIVE.  HOW THEN DOES ONE ACCOMPLISH THIS OBJECTIVE   01137018
                WITHIN A CLASSROOM ORGANIZATION ≥THE MAXIMIZATION OF GAIN 01137019
                AND EFFECTIVENESS+.  THE INSTRUCTOR SHOULD BEGIN BY POSING01137020
                A PARTICULAR LEARNING OBJECTIVE AND DIRECTING THE         01137021
                DISCUSSION THROUGH THE OBJECTIVE≤S CHARACTERISTICS,       01137022
                PERHAPS OUTLINING THEM ON THE BOARD, AND THEN ASKING THE  01137023
                STUDENTS WHAT STEPS THEY WOULD TAKE TO ACCOMPLISH THIS    01137024
                OBJECTIVE WITHIN THE CLASSROOM.  INSTRUCTOR≤S ROLE DURING 01137025
                THIS PART OF THE DISCUSSION IS TO DRAW IN THE             01137026
                SOCIAL-INTERACTION-ORGANIZATIONAL EFFECTS WHICH RELATE TO 01137027
                CERTAIN PROCEDURES AND TO THEN POSE QUESTIONS AS TO       01137028
                WHETHER THESE FACTORS ARE DESIRABLE OR PARSIMONIOUS WITH  01137029
                THE OBJECTIVE+                                            01137030
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01137 10
*MATERIALS      BLANK                                                     01137  5
*LEVEL          ALL GRADES                                                01137  8
*GENERAL        ALL CANDIDATES                                            01137  7
*HOURS          1                                                         01137  6
                EVALUATION OF ANALYSIS AND APPLICATION SKILLS.            01137038
*FILE           ROLE  LEARNING MANAGEMENT  PROBLEM SOLVING                01137  9

*OBJECTIVES     TO CONTINUE THE GENERALIZATION OF PREVIOUS CONCEPTS AND   01138029
                PRINCIPLES INTO THE SPECIFIC AREA OF LEARNING MANAGEMENT, 01138030
                IN THIS CASE, LONG TERM LEARNING OBJECTIVES -- TO CONTINUE01138031
                THE APPLICATION OF DEFINITION OF LEARNING OBJECTIVES.     01138032
*PREREQUISITE PREVIOUS MODULES ON ROLE, PERSONALITY AND SOCIAL            01138033
                INTERACTION.                                              01138034
*EXPERIENCE     CONTINUED DISCUSSION OF THE MANAGEMENT OF LEARNING.  THE  01138011
                ESSENCE OF THIS MODULE IS TO DEVELOP THE CONCOMITANT      01138012
                EFFECTS OF LEARNING MANAGEMENT OVER TIME AND THE          01138013
                GENERALIZED EFFECTS OF CLASSROOM ORGANIZATION TOWARD BROAD01138014
                LEARNING OBJECTIVES.  THE INSTRUCTOR SHOULD BEGIN BY      01138015
                ASKING THE STUDENTS WHAT GENERAL LEARNING OBJECTIVES MIGHT01138016
                BE DESIRABLE IN THE CLASSROOM.  AS THE DISCUSSION         01138017
                PROGRESSES, THE INSTRUCTOR MUST CONSTANTLY DIRECT         01138018
                SUGGESTIONS TOWARD MORE EXPLICIT PHRASING AND DEFINITION  01138019
                ≥IT MAY HELP TO RE-INTRODUCE THE PIAGETIAN IDEA OF        01138020
                VERTICAL DECALAGES+ AND HOW THESE REAPPEAR OVER TIME.     01138021
                TAKING ONE OF THE EXAMPLES THE INSTRUCTOR SHOULD THEN ASK 01138022
                THE STUDENTS TO ATTEMPT TO SUGGEST A CLASSROOM STRUCTURE  01138023
                THAT WOULD ENHANCE THIS OBJECTIVE.  THE INSTRUCTOR≤S ROLE 01138024
                HERE, AS BEFORE, IS TO CHANNEL STUDENT DISCUSSION INTO AS 01138025
                EXPLICIT AS POSSIBLE STATEMENTS AND THEN TO SUGGEST       01138026
                APPARANT RELATIONAL EFFECTS IN OTHER AREAS WHICH MAY OR   01138027
                MAY NOT BE DESIRABLE WITH OBJECTIVES.                     01138028
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01138 10
*MATERIALS      BLANK                                                     01138  5
*LEVEL          ALL GRADES                                                01138  8
*GENERAL        ALL CANDIDATES                                            01138  7
*HOURS          1                                                         01138  6
*EVALUATION     EVALUATION OF LEVEL AND QUALITY OF PARTICIPATION AND LATER01138035
                EVALUATION OF ANALYSIS AND APPLICATION SKILLS.            01138036
*FILE           ROLE  MANAGEMENT OF LEARNING  PIAGET                      01138  9

*OBJECTIVES     BEGIN TO DEVELOP UNDERSTANDING OF THE CONDITIONS THAT     01139024
```

```
               SURROUND ASSOCIATIONAL AND EVALUATIVE THINKING             01139025
               2CONVERGENT - DIVERGENT*                                   01139026
*PREREQUISITE  PREVIOUS MODULES WITHIN THE LEARNING SEQUENCE              01139027
*EXPERIENCE    DEMONSTRATION OF THE OUTCOME OF TWO SPECIFIC LEARNING      01139011
               ENVIRONMENTS.  IN THIS MODULE THE INSTRUCTOR WILL FIRST    01139012
               INDICATE THAT THE PURPOSE IS TO (PLAY( WITH A PARTICULAR   01139013
               PROBLEM CONCERNED WITH (WHY JOHNNY DOESNST LEARN(. IN      01139014
               WHICH A SITUATIONAL PERSPECTIVE ON SOME CHILD IS PROVIDED 01139015
               AND THE STUDENTS ARE ASKED TO DEVELOP AS MANY POSSIBLE     01139016
               IDEAS AS THEY CAN INTO THE NATURE AND SOLUTION OF THE      01139017
               PROBLEM.  THE NUMBER AND UNIQUENESS OF THE IDEAS ARE       01139018
               RECORDED.  THIS IS FOLLOWED BY THE INSTRUCTOR THEN         01139019
               PRESENTING ANOTHER PROBLEM WHICH THE STUDENTS ARE TO TAKE 01139020
               HOME AND ATTEMPT TO PROVIDE SOLUTIONS FOR IN THE SAME      01139021
               MANNER AS BEFORE, BUT IN THIS INSTANCE THEY WILL BE GRADED01139022
               FOR THEIR EFFORTS.                                         01139023
*SETTING       SMALL GROUP 21-12 STUDENTS*  COLLEGE                       01139 10
*MATERIALS     TWO SITUATIONAL PERSPECTIVES CONCERNING A CHILD AND SOME   01139  5
               LEARNING PROBLEM                                           01139
*LEVEL         ALL GRADES                                                 01139  8
*GENERAL       ALL CANDIDATES                                             01139  7
*HOURS         1/2                                                        01139  6
*EVALUATION    DEGREE AND NATURE OF STUDENT PARTICAPATION                 01139028
*FILE          ROLE  LEARNING PROBLEM  SOCIAL INTERACTION                 01139  9
```

```
*OBJECTIVES    DEVELOP EXPERIENTIAL AND CONCEPTUAL BASE FOR THE           01140027
               UNDERSTANDING OF THE NATURE OF AND CONDITIONS SURROUNDING 01140028
               ASSOCIATIONAL AND EVALUATIVE COGNITION.                    01140029
*PREREQUISITE  PREVIOUS MODULE ON ASSOCIATIONAL AND EVALUATIVE THOUGHT    01140030
               PREVIOUS EXPERIENCE IN ANALYZING AND CONCEPTUALIZING       01140031
               PERSONAL BEHAVIOR                                          01140032
*EXPERIENCE    CONTINUED DEMONSTRATION OF THE OUTCOME OF TWO SPECIFIC     01140011
               LEARNING ENVIRONMENTS.  SCORE EXERCISES FROM PREVIOUS      01140012
               MODULE ON THE BASIS OF NUMBER AND UNIQUENESS OF IDEAS      01140013
               PRESENTED 2UNIQUE BEING DETERMINED BY THE LITERAL          01140014
               QUANTITATIVE SENSE* IN AN INFORMAL FASHION 2CATEGORIZE AND01140015
               CHECK OFF CATEGORIES ON THE BOARD OR SOMETHING SIMILAR*.   01140016
               THEN CONSIDER CONTENT OF THE SUGGESTIONS.  FIRST IN-CLASS 01140017
               NON-FORMAL EXERCISE WILL SHOW GREATER NUMBER AND MORE      01140018
               UNIQUE IDEAS AND CONTENT SHOULD BE FURTHER REMOVED FROM    01140019
               STANDARD EDUCATIONAL MODELS.  AFTER DEMONSTRATING          01140020
               DIFFERENCES BETWEEN TWO CONDITIONS BEGIN DISCUSSION OF WHY01140021
               THE DIFFERENCES MIGHT OCCUR.  AS GROUP BEGINS TO FORM      01140022
               INSIGHTS INTO ASSOCIATIONAL AND EVALUATIVE TYPES OF        01140023
               THINKING AND THE CONDITIONS UNDER WHICH THEY OCCUR, REVIEW01140024
               THE THEORETICAL AND EMPIRICAL CONCEPTIONS DEVELOPED BY     01140025
               WALLACH AND KOGAN, MEDNIK, AND OTHER ASSOCIATIONISTS.      01140026
*SETTING       SMALL GROUP 21-12 STUDENTS*  COLLEGE                       01140 10
*MATERIALS     RECORDS OF IDEAS AND STUDENT PAPERS PRODUCED IN ACCORDANCE01140  5
               WITH THE PREVIOUS MODULE.                                  01140
*LEVEL         ALL GRADES                                                 01140  8
*GENERAL       ALL CANDIDATES                                             01140  7
*HOURS         1                                                          01140  6
*EVALUATION    MULTIPLE-CHOICE EXAMINATION ON CONCEPTS AND CONDITIONS.    01140033
               ANALYSIS OF LATER STUDENT EFFORTS 2PAPERS, ROLE-PLAYING.   01140034
               CLASS DISCUSSION* FOR INCREASE IN ASSOCIATIONAL PRODUCTION01140035
               AND INCLUSION OF CONDITIONS IN CLASSROOM SITUATIONS        01140036
               2STUDENT SUGGESTED* WHICH ENHANCE THIS DEVELOPMENT IN      01140037
               CHILDREN.                                                  01140038
*FILE          ROLE  COGNITION  SOCIAL INTERACTION                        01140  9
```

```
*OBJECTIVES    GENERALIZATION OF PERSONAL EXPERIENCIAL BASE AND CONTENT  01141030
               BASE CONCERNED WITH CONCEPT OF AND CONDITIONS SURROUNDING 01141031
               ASSOCIATIONAL AND EVALUATIVE LEARNING-COGNITION.          01141032
               SPECIFICALLY GENERALIZATION INTO ELEMENTARY SCHOOL        01141033
               SITUATIONAL PERSRECTIVE FOCUSING ON SUBJECTS AND          01141034
               CONDITIONS.                                               01141035
*PREREQUISITE PREVIOUS MODULES ON EVALUATIVE AND ASSOCIATIONAL THOUGHT. 01141036
*EXPERIENCE    DISCUSSION OF SITUATIONAL PERSPECTIVE WITHIN THE          01141011
               ELEMENTARY SCHOOL IN WHICH CONDITIONS CAN BE ALTERED FOR  01141012
               DIFFERENT TYPES OF LEARNING-COGNITION ACTIVITIES.  THIS   01141013
               DISCUSSION, BASED UPON AND REFERING BACK TO PREVIOUS      01141014
               MODULES ON ASSOCIATIONAL AND EVALUATIVE COGNITION, SHOULD 01141015
               DEVELOP THREE SPECIFIC AREAS IN WHICH CONDITIONS SHOULD BE01141016
               ALTERED TO PRODUCE DIFFERENT LEARNING-COGNITION OUTCOMES: 01141017
               1* CLIMATE+ 2* CONTENT ORIENTATION+ AND 3* TEACHER        01141018
               BEHAVIOR.  CLIMATE REFERS TO SUCH THINGS AS THE ORDERING  01141019
               OF GROUP BEHAVIOR, FREEDOM FROM THREAT, IDEA OF PLAY AND  01141020
               PLAYFULLNESS, ETC.  CONTENT ORIENTATION REFERS TO FREEDOM 01141021
               FROM SYSTEMATIC RESTRAINTS WITHIN CONTENT AREA BEING USED 01141022
               AND DEVELOPMENT OF FANTASY.  TEACHER BEHAVIOR REFERS TO   01141023
               THE SELECTIVE USE OF REINFORCEMENT FOR CERTAIN OBJECTIVES,01141024
               ALTERATION OF EVALUATIVE DEVISES AND FEEDBACK TECHNIQUES, 01141025
               ETC.  FINALLY COMPARE AND CONTRAST WALLACH, BEREITER, AND 01141026
               GETZELS ≥GETZELSS TAXONOMY OF ADVANCED PROBLEMS AND THE   01141027
               USE OF ASSOCIATIONAL THOUGHT TO ARRIVE AT PROBLEM         01141028
               DEFINITION AND SOLUTION*.                                 01141029
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01141 10
*MATERIALS     BLANK                                                     01141  5
*LEVEL         ALL GRADES                                                01141  8
*GENERAL       ALL CANDIDATES                                            01141  7
*HOURS         1-2                                                       01141  6
*EVALUATION    PAPER ASSIGNMENT IN WHICH STUDENTS ARE DIRECTED TO DEVELOP01141037
               AND DESCRIBE THREE LEARNING ACTIVITIES AND THE CONDITIONS 01141038
               UNDER WHICH THEY WOULD BE TAUGHT OR INDUCED+ OR, A        01141039
               SITUATIONAL PERSRECTIVE FROM WHICH THE STUDENT IS ASKED TO01141040
               DESCRIBE WHAT PARTICULAR PROBLEMS ARE OCCURRING BETWEEN   01141041
               OBJECTIVE AND OUTCOME AND SUGGESTIONS AS TO HOW THESE     01141042
               PROBLEMS MIGHT BE REMEDIED.                               01141043
*FILE          ROLE  SOCIAL INTERACTION  CONTENT                         01141  9
```

```
*OBJECTIVES    TO APPLY CONCEPTS, PRINCIPLES AND INTERESTS INTO A        01142021
               SITUATIONAL PERSRECTIVE AIMED AT FURTHER DEVELOPMENT OF   01142022
               CAPACITIES TO ANALYZE AND RELATE FACTORS WITHIN A LEARNING01142023
               ENVIRONMENT FOR THE ACCOMPLISHMENT OF CERTAIN SPECIFIC    01142024
               OBJECTIVES.                                               01142025
*PREREQUISITE PREVIOUS MODULES IN HUMAN LEARNING, SPECIFICALLY ON ROLE, 01142026
               PERSONALITY AND SOCIAL INTERACTION                        01142027
*EXPERIENCE    STUDENT PROJECT ON THE MANAGEMENT OF LEARNING AND LEARNING01142011
               CONDITIONS.  FOR THIS PROJECT, THE STUDENTS ARE TO DEVELOP01142012
               AND DEFINE THREE DIFFERENT LEARNING OBJECTIVES OF WHICH AT01142013
               LEAST IS GENERAL OR RECURRING.  THEY ARE THEN ASKED TO    01142014
               DEVELOP THE CONDITIONS BY WHICH THEY WOULD BE TAUGHT AND  01142015
               HOW THEY WOULD GENERALLY STRUCTURE THE LEARNING           01142016
               ENVIRONMENT FOR MAXIMAL ACCOMPLISHMENT OF THE OBJECTIVES. 01142017
               FINALLY, THEY ARE ASKED TO IDENTIFY THE CRITICAL POINTS OF01142018
               ELEMENTS WHICH MIGHT CAUSE THE GREATEST AMOUNT OF         01142019
               RESISTANCE TO THE ACCOMPLISHMENT OF THESE OBJECTIVES.     01142020
*SETTING       INDEPENDENT  COLLEGE                                      01142 10
*MATERIALS     BLANK                                                     01142  5
*LEVEL         ALL GRADES                                                01142  8
*GENERAL       ALL CANDIDATES                                            01142  7
*HOURS         10-20                                                     01142  6
*EVALUATION    PAPERS WILL BE EVALUATED BY DEFINITIVENESS OF OBJECTIVES, 01142028
               BREADTH OF CONCEPTION, TOTALITY OF RELATIONAL PROVISION,  01142029
               INTERNAL CONSISTENCY BETWEEN PARTS.                       01142030
*FILE          ROLE  MANAGEMENT OF LEARNING  SOCIAL INTERACTION          01142  9
```

```
*OBJECTIVES    TO COMPARE AND CONTRAST BETWEEN MAJOR THEORIES OF          01536 23
               INTELLIGENCE.                                              01536 24
*PREREQUISITE BEFORE THE DEBATE, EACH STUDENT WOULD HAVE TO RESEARCH THE01536 25
               DIFFERENT MEN≤S THEORIES OF INTELLIGENCE,                  01536 26
*EXPERIENCE    WORKING IN PAIRS, THE STUDENTS WOULD BE ASSIGNED ONE OF    01536 11
               THE FOLLOWING MEN≤S THEORY OF INTELLIGENCE.  ≥1+ BENET,    01536 12
               ≥2+ SPEARMAN, ≥3+ THORNDIKE, ≥4+ THURSTONE, ≥5+ GUILFORD, 01536 13
               ≥6+ D. WECHSTER, ≥7+ J. PIAGET.  EACH PAIR WOULD BE        01536 14
               REQUIRED TO DEBATE WITH ANOTHER PAIR OF STUDENTS THE TOPIC01536 15
               (THEORIES OF INTELLIGENCE AND INTELLECTUAL FUNCTIONING.(   01536 16
               EACH PAIR OF STUDENTS WOULD BE REQUIRED TO DEFEND HIS OWN 01536 17
               THEORY.  THEY WOULD, OF COURSE, HAVE TO KNOW THE OTHER     01536 18
               THEORIES IN ORDER TO ADEQUATELY DEFEND THEIR OWN.  THE     01536 19
               DEBATES COULD BE CONDUCTED IN FRONT OF LARGE GROUPS OF     01536 20
               STUDENTS OR SEVERAL DEBATES COULD BE CONDUCTED AT ONE      01536 21
               TIME.                                                      01536 22
*SETTING       LARGE GROUP  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE          01536 10
*MATERIALS     NONE.                                                      01536  5
*LEVEL         ALL GRADES                                                 01536  8
*GENERAL       ALL CANDIDATES                                             01536  7
*HOURS         1-2                                                        01536  6
*EVALUATION    ESSAY! DESCRIBE ANY TWO THEORIES OF INTELLIGENCE ≥OTHER    01536 27
               THAN THE ONE YOU DEFENDED IN THE DEBATE+,  SPECIFICALLY,   01536 28
               HOW DO THESE THEORIES DIFFER FROM THE ONE YOU DEFENDED IN  01536 29
               THE DEBATE.                                                01536 30
*FILE          INTELLIGENCE  THEORIES                                     01536  9
```

```
*OBJECTIVES    TO BE ABLE TO IDENTIFY DIFFERENT KINDS OF TESTS USED TO    01537 16
               MEASURE INTELLIGENCE.                                      01537 17
*PREREQUISITE STUDENTS ARE TO HAVE SOME IDEA OF WHAT INTELLIGENCE IS AND01537 18
               WHAT INTELLIGENCE TESTS ATTEMPT TO MEASURE.                01537 19
*EXPERIENCE    THE STUDENTS ARE TO EXAMINE BUROS, MENTAL MEASUREMENTS     01537 11
               YEARBOOK AND MAKE A LIST OF THE MAJOR KINDS OF TESTS USED 01537 12
               TO MEASURE INTELLIGENCE.  UNDER EACH MAJOR CLASSIFICATION,01537 13
               THEY ARE TO INCLUDE THREE STANDARDIZED TESTS - CURRENTLY  01537 14
               BEING USED IN SCHOOLS.                                     01537 15
*SETTING       INDEPENDENT  COLLEGE                                       01537 10
*MATERIALS     BUROS, MENTAL MEASUREMENTS YEARBOOKS.                      01537  5
*LEVEL         ALL GRADES                                                 01537  8
*GENERAL       ALL CANDIDATES                                             01537  7
```

```
*HOURS         1                                                    01537  6
*EVALUATION    OBJECTIVE TEST QUESTION:  IDENTIFY TWO GROUPS OF     01537 20
               INTELLIGENCE TESTS+ TWO INDIVIDUAL INTELLIGENCE TESTS+ ONE01537 21
               SPEED AND ONE POWER INTELLIGENCE TEST.               01537 22
*FILE          INTELLIGENCE  TESTS  BUROS                           01537  9
```

```
*OBJECTIVES    TO BE ABLE TO RECALL RESEARCH CONCLUSIONS REGARDING THE   01538 18
               CHARACTERISTICS OF MENTAL GROWTH AND INTELLIGENCE.        01538 19
*PREREQUISITE  NONE.                                                     01538 20
*EXPERIENCE    CANDIDATES ARE TO READ:  ASSOCIATION FOR SUPERVISION AND  01538 11
               CURRICULUM DEVELOPMENT, N.E.A. 1966 YEARBOOK:  LEARNING   01538 12
               AND MEANTAL HEALTH IN THE SCHOOLS, WASHINGTON, 1966.      01538 13
               CHAPTER 6, [LEARNING AND BECOMING:  NEW MEANINGS TO       01538 14
               TEACHERS[, BY MARIE M. HUGHES.  THIS IS AN EXCELLENT      01538 15
               CHAPTER ON INTELLIGENCE AND THE INFLUENCES ON             01538 16
               INTELLIGENCE.                                             01538 17
*SETTING       INDEPENDENT  COLLEGE                                      01538 10
*MATERIALS     BLANK                                                     01538  5
*LEVEL         ALL GRADES                                                01538  8
*GENERAL       ALL CANDIDATES                                            01538  7
*HOURS         1/2                                                       01538  6
*EVALUATION    LIST EFFECTS OF ENVIRONMENTAL ENCOUNTERS WHICH ARE        01538 21
               DISCUSSED IN CHAPTER 6 OF THE ASCD YEARBOOK: 1966.        01538 22
*FILE          INTELLIGENCE  MENTAL GROWTH                               01538  9
```

```
*OBJECTIVES    TO ILLUSTRATE THE POSITIVE CORRELATION BETWEEN LANGUAGE   01539 19
               AND MENTAL DEVELOPMENT.                                   01539 20
*PREREQUISITE  STUDENTS MUST KNOW HOW TO COMPUTE A CORRELATION.          01539 21
*EXPERIENCE    EACH CANDIDATE IS TO BE GIVEN THE NAME AND HOME PHONE     01539 11
               NUMBERS OF 2 OR 3 ELEMENTARY STUDENTS.  THEY ≥CANDIDATES+ 01539 12
               ARE TO CALL THE HOMES AND ASK THE PARENTS FOR INFORMATION 01539 13
               ABOUT THE TIME THE CHILD FIRST STARTED TALKING.  THE      01539 14
               RESULTS OF THIS INFORMATION WILL THEN BE CORRELATED WITH  01539 15
               STANDARDIZED I.Q. TESTS WHICH HAVE BEEN GIVEN TO THE      01539 16
               CHILDREN.  RESULTS WILL PROBABLY SHOW THAT EARLY TALKERS  01539 17
               ARE OF ABOVE AVERAGE INTELLIGENCE.                        01539 18
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COMMUNITY                    01539 10
*MATERIALS     LIST OF ELEMENTARY STUDENTS NAMES, PHONE NUMBERS AND THEIR01539  5
               RESULTS OF STANDARDIZED I.Q. TESTS.                       01539
*LEVEL         ALL GRADES                                                01539  8
*GENERAL       ALL CANDIDATES                                            01539  7
*HOURS         1/2                                                       01539  6
*EVALUATION    T-F TEST ITEM.  THE CORRELATION BETWEEN VERBAL SKILLS AND 01539 22
               INTELLIGENCE IS GENERALLY FOUND TO BE A NEGATIVE          01539 23
               RELATIONSHIP.  ANSWER:  FALSE, IT IS GENERALLY A POSITIVE 01539 24
               CORRELATION.                                              01539 25
*FILE          INTELLIGENCE  MENTAL DEVELOPMENT  INTELLIGENCE TESTS      01539  9
```

```
*OBJECTIVES    TO BE ABLE TO IDENTIFY THE RELATIONSHIPS BETWEEN ≥1+      01540 19
               NON-RELATED CHILDREN, ≥2+ NON-TWIN SIBLINGS, ≥3+ FRATERNAL01540 20
               TWINS AND, ≥4+ IDENTICAL TWINS IN REGARDS TO INTELLIGENCE.01540 21
*PREREQUISITE  THE STUDENTS MUST KNOW HOW TO COMPUTE A CORRELATION       01540 22
               COEFFICIENT.                                              01540 23
*EXPERIENCE    GIVE THE CANDIDATES A LIST WITH THE FOLLOWING DATA:  1.   01540 11
               UNRELATED STUDENTS AND THEIR I.Q.  2.  NON-TWIN SIBLINGS  01540 12
               AND THEIR I.Q.  3.  FRATERNAL TWINS AND THEIR I.Q.  4.    01540 13
               IDENTICAL TWINS AND THEIR I.Q.  THE CANDIDATES ARE TO     01540 14
               COMPARE THE LISTS AND MAKE A TENTATIVE CONCLUSION ABOUT   01540 15
```

```
              THE RELATIONSHIP BETWEEN FAMILIES AND I.Q..  THE             01540 16
              CANDIDATES ARE THEN TO CITE ONE SOURCE ≥AUTHOR+ WHICH        01540 17
              SUPPORTS THEIR CONCLUSIONS.                                  01540 18
*SETTING      INDEPENDENT  COLLEGE                                         01540 10
*MATERIALS    BOOKS ON PSYCHOLOGY.  BIBLIOGRAPHY OF SOURCE ON I.Q.         01540  5
*LEVEL        ALL GRADES                                                   01540  8
*GENERAL      ALL CANDIDATES                                               01540  7
*HOURS        1/2                                                          01540  6
*EVALUATION   T-F ITEMS.  THE CORRELATION BETWEEN THE INTELLIGENCE OF      01540 24
              NON-TWIN SIBLINGS IS HIGHER THAN IT IS FOR FRATERNAL         01540 25
              TWINS.  ANSWER:  FALSE, IT IS LOWER.                         01540 26
*FILE         INTELLIGENCE  TESTS ≥I.Q.+                                   01540  9

*OBJECTIVES   TO COMPARE AND CONTRAST INDIVIDUAL CHILDREN AT DIFFERENT     01541 18
              LEVELS OF INTELLIGENCE.                                      01541 19
*PREREQUISITE NONE.                                                        01541 20
*EXPERIENCE   FILM:  [TESTING INTELLIGENCE WITH THE STANFORD-BINET.[       01541 11
              INDIANA UNIVERSITY, AUDIO-VISUAL CENTER, BLOOMINGTON,        01541 12
              IND..  SEQUENCES SHOWING UNREHEARSED RESPONSES OF FOUR       01541 13
              CHILDREN TO SELECTED ITEMS FROM THE STANFORD-BINET           01541 14
              INTELLIGENCE TEST.  THE CHILDREN VARY GREATLY IN THEIR       01541 15
              PERFORMANCE ON THESE ITEMS, THUS PROVIDING EXCELLENT         01541 16
              OPPORTUNITY FOR COMPARISON AND CONTRAST.                     01541 17
*SETTING      LARGE GROUP  COLLEGE                                         01541 10
*MATERIALS    FILM, PROJECTOR.                                             01541  5
*LEVEL        ALL GRADES                                                   01541  8
*GENERAL      ALL CANDIDATES                                               01541  7
*HOURS        18 MINUTES                                                   01541  6
*EVALUATION   ESSAY:  HOW ARE THE FOUR CHILDREN IN THE FILM THE SAME,      01541 21
              AND HOW ARE THEY DIFFERENT IN TERMS OF PERFORMANCE ON THE    01541 22
              STANFORD-BINET.  BE SPECIFIC.                                01541 23
*FILE         INTELLIGENCE  FILMS  STANFORD-BINET                          01541  9

*EXPERIENCE   EACH CANDIDATE IS TO READ AND SUMMARIZE:  MACKINNON,         01542 11
              DONALD W., [PERSONALITY CORRELATES OF CREATIVITY[ CHAPTER    01542 12
              6 IN PRODUCTIVE THINKING IN EDUCATION, EDITED BY, OSCHNER    01542 13
              AND BISH. N.E.A. WASHINGTON:  1965.                          01542 14
*OBJECTIVES   TO BE ABLE TO IDENTIFY PERSONALITY VARIABLES WHICH ARE       01542 15
              POSITIVELY CORRELATED WITH CREATIVITY.                       01542 16
*PREREQUISITE NONE.                                                        01542 17
*SETTING      INDEPENDENT  COLLEGE                                         01542 10
*MATERIALS    BOOK LISTED ABOVE.                                           01542  5
*LEVEL        ALL GRADES                                                   01542  8
*GENERAL      ALL CANDIDATES                                               01542  7
*HOURS        1                                                            01542  6
*EVALUATION   LIST THE MAJOR POSITIVE CORRELATES BETWEEN CREATIVITY AND    01542 18
              PERSONALITY VARIABLES.                                       01542 19
*FILE         CREATIVITY  INTELLIGENCE  PERSONALITY                        01542  9

*OBJECTIVES   TO BE ABLE TO IDENTIFY PERSONALITY VARIABLES WHICH ARE       01543 19
              POSITIVELY AND NEGATIVELY CORRELATED WITH CREATIVITY.        01543 20
*PREREQUISITE NONE.                                                        01543 21
*EXPERIENCE   THE STUDENTS ARE TO EXAMINE THE TOPIC OF [CREATIVE           01543 11
              ABILITY[ IN THE EDUCATION INDEX.  EACH STUDENT IS TO BRING01543 12
              TO CLASS A LIST CONTAINING:  ≥A+ 2 PERSONALITY               01543 13
              CHARACTERISTICS WHICH ARE POSITIVELY CORRELATED WITH         01543 14
              CREATIVITY.  ≥B+ 2 PERSONALITY CHARACTERISTICS WHICH ARE     01543 15
              NEGATIVELY CORRELATED WITH CREATIVITY.  ≥C+ THE REFERENCES01543 16
```

4

```
               FOR THE ABOVE.  A COMPOSITE LIST WILL BE MADE FROM THE     01543 17
               STUDENTS INDIVIDUAL LISTS,                                 01543 18
*SETTING       INDEPENDENT  SMALL GROUP ≥1-12 STUDENTS.  COLLEGE          01543 10
*MATERIALS     NONE.                                                      01543  5
*LEVEL         ALL GRADES                                                 01543  8
*GENERAL       ALL CANDIDATES                                             01543  7
*HOURS         1                                                          01543  6
*EVALUATION    POSITIVE AND NEGATIVE CORRELATES ARE LISTED ON A SHEET OF  01543 22
               PAPER AND THE STUDENTS ARE ASKED TO INDICATE WHICH          01543 23
               VARIABLES ARE POSITIVELY AND WHICH ARE NEGATIVELY          01543 24
               CORRELATED WITH CREATIVITY.                                01543 25
*FILE          CREATIVITY  PERSONALITY                                    01543  9

*OBJECTIVES    TO ILLUSTRATE THAT PSYCHOLOGICAL SAFETY AND FREEDOM ARE    01544 23
               ESSENTIAL TO THE ENCOURAGEMENT OF CREATIVITY.              01544 24
*PREREQUISITE NONE.                                                       01544 25
*EXPERIENCE    INSTRUCTOR RANDOMLY SELECTS 5 STUDENTS FOR GROUP A AND 5   01544 11
               STUDENTS FOR GROUP B.  BOTH GROUPS ARE INSTRUCTED TO THINK01544 12
               OF CREATIVE WAYS THAT A TIN-CAN CAN BE USED.  FOR THE      01544 13
               FIRST GROUP, EACH PERSON IS TO SUGGEST ONE WAY AND THEN IT01544 14
               IS THE NEXT PERSON≤S TURN.  THE INSTRUCTOR MAY SAY NOTHING01544 15
               AT EACH RESPONSE OR MAY SAY BAD REMARKS ABOUT THE          01544 16
               SUGGESTION.  IN ANY CASE, THREAT SHOULD BE PRESENT.  FOR   01544 17
               GROUP B, ALLOW FREEDOM OF RESPONSE WITH A LOT OF PRAISE    01544 18
               FOR GOOD SUGGESTIONS.  ENCOURAGE EACH TO PARTICIPATE BUT   01544 19
               ALLOW FREEDOM AND PSYCHOLOGICAL SAFETY.  GROUP B WILL      01544 20
               PROBABLY BE MORE CREATIVE AND FEEL BETTER ABOUT IT TOO.    01544 21
               COMPARE FEELINGS OF THE TWO GROUPS AT THE END.             01544 22
*SETTING       LARGE GROUP  COLLEGE                                       01544 10
*MATERIALS     NONE.                                                      01544  5
*LEVEL         ALL GRADES                                                 01544  8
*GENERAL       ALL CANDIDATES                                             01544  7
*HOURS         1/4                                                        01544  6
*EVALUATION    HAVE EACH STUDENT ROLE-PLAY THE SITUATION EXPLAINED ABOVE  01544 26
               AS THE INSTRUCTOR VIDEO-TAPES THE SITUATION AND EVALUATES  01544 27
               THE TAPE WITH THE STUDENT AS TO THE DEGREE OF FREEDOM AND  01544 28
               SAFETY PERMITTED IN THE ROLE-PLAYING.                      01544 29
*FILE          CREATIVITY  PRAISE  POSITIVE REINFORCEMENT                 01544  9

*OBJECTIVES    FOR CANDIDATE TO BE ABLE TO DETECT THE RELATIONSHIP        01545 15
               BETWEEN INTELLIGENCE AND CREATIVITY.                       01545 16
*PREREQUISITE NONE.                                                       01545 17
*EXPERIENCE    EACH CANDIDATE IS TO READ AND BE ABLE TO SUMMARIZE:  DREW,01545 11
               ELIZABETH, M. [SELF-ACTUALIZATION:  A NEW FOCUS FOR        01545 12
               EDUCATION[, ASSOCIATION FOR SUPERVISION AND CURRICULUM     01545 13
               DEVELOPMENT, 1966 YEARBOOK: WASHINGTON, 1966.              01545 14
*SETTING       INDEPENDENT  COLLEGE                                       01545 10
*MATERIALS     1966 ASCD YEARBOOK.                                        01545  5
*LEVEL         ALL GRADES                                                 01545  8
*GENERAL       ALL CANDIDATES                                             01545  7
*HOURS         1                                                          01545  6
*EVALUATION    ESSAY:  DEFINE WHAT DREW CALLS INTELLIGENCE AND LIST WHAT  01545 18
               SHE SAYS THE EDUCATORS MUST DO TO FOSTER GREATER           01545 19
               CREATIVITY IN THE SCHOOLS.                                 01545 20
*FILE          INTELLIGENCE  CREATIVITY  SELF-ACTUALIZATION               01545  9

*OBJECTIVES    TO BE ABLE TO WRITE A DEFINITION OF SELF-CONCEPT.          01546 19
*PREREQUISITE NONE.                                                       01546 20
```

```
*EXPERIENCE      HAVE SMALL GROUPS OF 3 TO 5 STUDENTS EACH.  REQUEST THAT  01546 11
                 EACH GROUP DISCUSS AND ATTEMPT TO ARRIVE AT DEFINITIONS OF01546 12
                 SELF-CONCEPT.  PROVIDE EACH GROUP WITH TEXTS ON           01546 13
                 EDUCATIONAL PSYCHOLOGY TO USE AS A GUIDE.  FOLLOWING A    01546 14
                 BRIEF PERIOD OF GROUP WORK ≥10-15 MINUTES+ RE-JOIN IN A   01546 15
                 LARGE GROUP FOR REPORTS AND DEFINITIONS.  A COMPOSITE     01546 16
                 DEFINITION CAN BE RECORDED BY THE INSTRUCTOR ON THE BOARD 01546 17
                 FOR ALL.                                                  01546 18
*SETTING         COLLEGE                                                   01546 10
*MATERIALS       BOOKS ON EDUCATIONAL PSYCHOLOGY.                          01546  5
*LEVEL           ALL GRADES                                                01546  8
*GENERAL         ALL CANDIDATES                                            01546  7
*HOURS           BLANK                                                     01546  6
*EVALUATION      HOW STUDENTS RESPOND TO THIS STATEMENT:  [SELF-CONCEPT IS 01546 21
                 THE CONCEPT OF THE SELF.[  HOW IS THIS DEFINITION         01546 22
                 INADEQUATE IN LIGHT OF THE DEFINITION DISCUSSED IN CLASS^ 01546 23
                 BE SPECIFIC.                                              01546 24
*FILE            SELF-CONCEPT  DEFINITIONS                                 01546  9

*OBJECTIVES      TO BE ABLE TO WRITE A DEFINITION OF SELF-CONCEPT.         01547 16
*PREREQUISITE    NONE.                                                     01547 17
*EXPERIENCE      THE CANDIDATES ARE TO SELECT READINGS FROM THE BOOK, THE  01547 11
                 SELF IN GROWTH, TEACHING AND LEARNING.  SELECTED READINGS 01547 12
                 BY DON E. HAMACHEK.  PRENTICE-HALL, INC. ENGLEWOOD CLIFFS,01547 13
                 1965.  FROM THEIR READINGS, THE STUDENTS ARE TO WRITE WHAT01547 14
                 THEY THINK IS AN ADEQUATE DEFINITION OF SELF-CONCEPT.     01547 15
*SETTING         INDEPENDENT  COLLEGE                                      01547 10
*MATERIALS       BLANK                                                     01547  5
*LEVEL           ALL GRADES                                                01547  8
*GENERAL         ALL CANDIDATES                                            01547  7
*HOURS           1                                                         01547  6
*EVALUATION      WRITE AN ADEQUATE DEFINITION OF SELF-CONCEPT.             01547 18
*FILE            SELF-CONCEPT  SELF  DEFINITIONS                           01547  9

*OBJECTIVES      FOR THE STUDENTS TO BEHAVE IN A CONSISTANT MANNER AND ALSO01548 19
                 TO BE ABLE TO RECALL THAT A PERSON CANNOT HELP BUT BE     01548 20
                 HIMSELF AND FEEL UNCOMFORTABLE WHEN HE IS NOT HIMSELF.    01548 21
*PREREQUISITE    EXPERIENCE MODULES 1546-47.  DEFINITION OF SELF-CONCEPT.  01548 22
*EXPERIENCE      STUDENTS ARE TO LISTEN TO THE AUDIO-TAPE OF CARL ROGERS≤  01548 11
                 TALK [TO BE THAT SELF WHICH ONE TRULY IS.[  THE OUTLINE OF01548 12
                 THE TALK SHOULD BE PASSED OUT BEFORE PLAYING THE TAPE.    01548 13
                 THIS MAKES THE TAPE EASIER TO FOLLOW.  DR. ROGERS DOES AN 01548 14
                 EXCELLENT JOB ON THIS TAPE.  OUTLINE AND RECORDING ARE    01548 15
                 AVAILABLE FROM DR. DON HAMACHEK, MICHIGAN STATE           01548 16
                 UNIVERSITY, EAST LANSING, MICHIGAN OR DR. JAMES CONLEY,   01548 17
                 WESTERN ILLINOIS UNIVERSITY, MACOMB, ILLINOIS, 61455.     01548 18
*SETTING         LARGE GROUP  COLLEGE                                      01548 10
*MATERIALS       TAPE RECORDING OF DR. CARL ROGERS+ TAPE RECORDER+ OUTLINE 01548  5
                 OF TAPE.                                                  01548
*LEVEL           ALL GRADES                                                01548  8
*GENERAL         ALL CANDIDATES                                            01548  7
*HOURS           1                                                         01548  6
*EVALUATION      ASK THE STUDENTS TO RECALL THREE FACTORS WHICH DR. ROGERS 01548 23
                 STATED WERE SIGNS OF MOVING TOWARDS BEING THAT SELF WHICH 01548 24
                 ONE TRULY IS.                                             01548 25
*FILE            SELF-CONCEPT  MENTAL HEALTH                               01548  9

*OBJECTIVES      TO BE ABLE TO RECALL THE RESEARCH CONCLUSIONS REGARDING   01549 20
```

```
                THE GENERAL NATURE OF THE SELF.                          01549 21
*PREREQUISITE EXPERIENCE MODULES 1546 AND 1547 - DEFINITIONS OF          01549 22
                SELF-CONCEPT.                                            01549 23
*EXPERIENCE     GIVE EACH STUDENT AN EXTENDED LIST OF BOTH VALID AND     01549 11
                INVALID RESEARCH FINDINGS CONCERNING THE GENERAL NATURE OF01549 12
                THE SELF.  MAKE IT LIKE A TAKE-HOME-QUIZ.  GIVE THEM OVER 01549 13
                NIGHT TO FIND OUT WHICH CONCLUSIONS ARE VALID - WHICH ARE 01549 14
                INVALID,  SUGGEST THAT THEY WORK TOGETHER SO THAT THEY DO 01549 15
                NOT HAVE TO LOOK UP ALL THE ANSWERS THEMSELVES.  ALSO     01549 16
                SUGGEST THAT THEY CITE EVIDENCE AS TO WHY EACH CONCLUSION 01549 17
                IS VALID.  CLASS DISCUSSION WILL FOLLOW THE NEXT DAY ON   01549 18
                EACH CONCLUSION,                                         01549 19
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                     01549 10
*MATERIALS      NONE.                                                    01549  5
*LEVEL          ALL GRADES                                               01549  8
*GENERAL        ALL CANDIDATES                                           01549  7
*HOURS          1                                                        01549  6
*EVALUATION     ASK THE STUDENTS TO LIST 5 RESEARCH CONCLUSIONS          01549 24
                REGARDING THE GENERAL NATURE OF THE SELF.                01549 25
*FILE           SELF-CONCEPT  SELF                                       01549  9

*OBJECTIVES     TO ILLUSTRATE THE RELATIONSHIP BETWEEN SELF-CONCEPT AND  01550 22
                SCHOOL ACHIEVEMENT.  MORE SPECIFICALLY TO SHOW THAT      01550 23
                UNDERESTIMATE THEMSELVES.                                01550 24
*PREREQUISITE NONE                                                       01550 25
*EXPERIENCE     SELECT A GROUP OF 3-5 LOW SELF-CONCEPT STUDENTS AND 3-5  01550 11
                HIGH-SELF-CONCEPT STUDENTS IN GRADES 5 OR 6.  SELECTION  01550 12
                CAN BE MADE BY ADMINISTERING SELF-CONCEPT SCALE SUCH AS  01550 13
                [I AM - - - .,[  [OTHERS THINK I AM - - - .[^  ETC.      01550 14
                INTERVIEW EACH STUDENT AND PLACE THE INTERVIEW ON        01550 15
                VIDEO-TAPE.  SELECT THOSE SIGNIFICANT STATEMENTS WHICH   01550 16
                ILLUSTRATE SIGNIFICANT DIFFERENCE IN THEIR RESPONSES.    01550 17
                THEN HAVE THE COMPOSITE TAPE SHOWN TO THE LARGE CLASS    01550 18
                SETTING.  THE CANDIDATES WILL BE REQUIRED TO LIST        01550 19
                SIGNIFICANT DIFFERENCES AS THEY OCCUR.  THE TAPE CAN BE  01550 20
                STOPPED AFTER EACH DIFFERENCE.                           01550 21
*SETTING        LARGE GROUP  COLLEGE                                     01550 10
*MATERIALS      VIDEO-TAPE RECORDING OF HIGH + LOW SELF CONCEPT STUDENTS 01550  5
*LEVEL          ALL GRADES                                               01550  8
*GENERAL        ALL CANDIDATES                                           01550  7
*HOURS          1                                                        01550  6
*EVALUATION     HAVE THE STUDENTS TURN IN THEIR LIST CONTAINING THE      01550 26
                SIGNIFICANT DIFFERENCES FROM THE VIDEO-TAPE FOR          01550 27
                EVALUATION.                                              01550 28
*FILE           ACHIEVEMENT  SELF-CONCEPT,  UNDERACHIEVERS.              01550  9

*OBJECTIVES     TO ILLUSTRATE THE CONSISTENCY OF SELF-CONCEPT AND GENERAL 01551 25
                PERSONALITY CHARACTERISTICS OVER TIME.                   01551 26
*PREREQUISITE NONE.                                                      01551 27
*EXPERIENCE     EACH CANDIDATE IS TO COMPILE A SCRAP-BOOK ILLUSTRATING   01551 11
                HIS OWN LIFE.  PICTURES FOR THE SCRAP-BOOK ARE TO COME   01551 12
                FROM PAPERS, MAGAZINES, ADVERTISEMENTS, BOOKS, OR        01551 13
                PICTURES, DRAWINGS, FIGURES, ETC. CREATED BY THE CANDIDATE01551 14
                HIMSELF,  NO PHOTOGRAPHES OF THE CANDIDATE ARE TO BE     01551 15
                INCLUDED.  EACH CANDIDATE IS TO ILLUSTRATE HIS CHILDHOOD, 01551 16
                ADOLESENCE AND PRESENT TIME.  EACH PICTURE IS TO BE      01551 17
                EXPLAINED BY THE CANDIDATE AS TO WHY IT WAS CHOSEN BY HIM.01551 18
                FOLLOWING THE COMPLETION OF THE SCRAP BOOK, THE INSTRUCTOR01551 19
                WILL PRESENT THE RESEARCH CONCLUSIONS REGARDING THE      01551 20
```

```
               CONSISTENCY OF SELF-CONCEPTS AND GENERAL PERSONALITY         01551 21
               CHARACTERISTICS OVER TIME AND THE CANDIDATES CAN SEE IN      01551 22
               THEIR OWN SCRAP-BOOKS, WHETHER THE CONCLUSIONS ARE VALID     01551 23
               OR INVALID.                                                  01551 24
*SETTING       LARGE GROUP  COLLEGE                                         01551 10
*MATERIALS     NONE                                                         01551  5
*LEVEL         ALL GRADES                                                   01551  5
*GENERAL       ALL CANDIDATES                                               01551  7
*HOURS         4-5  DEPENDING ON THE STUDENT                                01551  6
*EVALUATION    THE INSTRUCTOR SHOULD EXAMINE THE SCRAP BOOKS AND POINT      01551 28
               OUT THE CONSISTENCY IN EACH TO THE STUDENT.                  01551 29
*FILE          SELF-CONCEPT  PERSONALITY                                    01551  9
```

```
*OBJECTIVES    TO DEMONSTRATE THAT IF THROUGH MILD PRESSURE OR REWARD, A    01552 22
               PERSON IS INDUCED TO DO SOMETHING CONTRARY TO HIS            01552 23
               SELF-CONCEPT, HE IS LIKELY TO ALTER HIS SELF-CONCEPT IN      01552 24
               THE DIRECTION OF HIS SPOKEN OPINION OF OVERT ACTION.         01552 25
*PREREQUISITE  NONE.                                                        01552 26
*EXPERIENCE    VIDEO-TPAE A BEGINNING SPEECH CLASS AT THE BEGINNING OF A    01552 11
               TERM.  ALSO AT THE BEGINNING, ASK EACH PERSON TO RATE        01552 12
               THEIR OWN ABILITY ≥SELF-CONCEPT↑ IN REGARD TO PUBLIC         01552 13
               SPEAKING.  VIDEO-TAPE THE CLASS AT THE END AND ALSO HAVE     01552 14
               EACH PERSON RATE THEIR OWN ABILITY AGAIN.  SHOW SECTIONS     01552 15
               OF THE FIRST VIDEO-TAPE TO EACH CANDIDATE AND ASK THEM TO    01552 16
               PREDICT WHAT WILL HAPPEN IN REGARDS TO THE SELF-CONCEPT OF01552 17
               EACH SPEAKER.  ASK EACH CANDIDATE TO GIVE JUSTIFICATION      01552 18
               FOR THEIR CONCLUSIONS.  FOLLOWING A DISCUSSION OF WHAT       01552 19
               WOULD HAPPEN, SHOW LAST VIDEO-TAPE AND RESULTS OF SECOND     01552 20
               ADMINISTRATION OF SELF-CONCEPT SCALE.                        01552 21
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                         01552 10
*MATERIALS     VIDEO-TAPE MACHINE.                                          01552  5
*LEVEL         ALL GRADES                                                   01552  8
*GENERAL       ALL CANDIDATES                                               01552  7
*HOURS         1                                                            01552  6
*EVALUATION    GENERALLY SPEAKING IF A PERSON IS INDUCED, THROUGH MILD      01552 27
               PRESSURE OR REWARD TO DO SOMETHING CONTRARY TO HIS           01552 28
               SELF-CONCEPT, HE WILL HOLD MORE FIRMLY TO HIS ORIGINAL       01552 29
               SELF-CONCEPT.  ANSWER:  FALSE.  T - F TEST ITEM.             01552 30
*FILE          SELF-CONCEPT  VIDEO-TAPE                                     01552  9
```

```
*OBJECTIVES    FOR EACH CANDIDATE TO HAVE A MEASURED VIEW OF HIS            01553 16
               SELF-CONCEPT.                                                01553 17
*PREREQUISITE  NONE                                                         01553 18
*EXPERIENCE    EACH CANDIDATE WILL TAKE THE (TENNESSEE SELF-CONCEPT         01553 11
               SCALE).  THE RESULTS WILL GIVE EACH CANDIDATE A PICTURE OF01553 12
               HIS SELF-CONCEPT AS MEASURED BY THIS INSTRUMENT.  A          01553 13
               GENERAL INTERPRETATION OF THE INSTRUMENT SHOULD BE GIVEN     01553 14
               TO THE STUDENTS.                                             01553 15
*SETTING       LARGE GROUP  COLLEGE                                         01553 10
*MATERIALS     TENNESSEE SELF-CONCEPT SCALE.                                01553  5
*LEVEL         ALL GRADES                                                   01553  8
*GENERAL       ALL CANDIDATES                                               01553  7
*HOURS         1                                                            01553  6
*EVALUATION    SEE IF THEY HAVE TAKEN THE SCALE.                            01553 19
*FILE          SELF-CONCEPT  STANDARDIZED TEST  TENNESSEE SELF-CONCEPT      01553  9
               SCALE                                                        01553
```

```
*OBJECTIVES    TO POINT OUT THE RESEARCH CONCLUSIONS RELATED TO             01554 21
```

```
               SELF-CONCEPT AND PERSONALITY ADJUSTMENT.                01554 22
*PREREQUISITE EXPERIENCE MODULE NUMBER 1553.                           01554 23
*EXPERIENCE    EACH CONCLUSION SHOULD BE STATED BY THE INSTRUCTOR AND  01554 11
               ILLUSTRATED WITH APPROPRIATE EXAMPLES.  AS EACH CONCLUSION01554 12
               IS STATED, THE CANDIDATES ARE TO INDICATE ON A CHECK    01554 13
               LIST WHETHER THE CONCLUSION IS ≥1+ TRUE OF MYSELF.      01554 14
               ≥2+ NOT TRUE OF MYSELF.  OR ≥3+ I DON≤T KNOW WHETHER    01554 15
               IT IS TURE OF ME OR NOT.  FOLLOWING THE PRESENTATION    01554 16
               BY THE INSTRUCTOR, THE MAJOR CONCLUSION SHOULD BE       01554 17
               DISTRIBUTED TO THE CANDIDATES AND THE CANDIDATES THEN   01554 18
               SHOULD DISCUSS IN SMALL GROUPS EACH CONCLUSION AND      01554 19
               THEIR OWN RESPONSE TO IT AS RECORDED ON THE CHECK LIST. 01554 20
*SETTING       LARGE GROUP  COLLEGE                                    01554 10
*MATERIALS     ≥A+ RESULTS OF TENNESSEE SELF-CONCEPT SCALE.  ≥B+ CHECK 01554  5
               LIST FOR EACH CANDIDATE.                                01554
*LEVEL         ALL GRADES                                              01554  8
*GENERAL       ALL CANDIDATES                                          01554  7
*HOURS         1                                                       01554  6
*EVALUATION    ESSAY:  LIST 6 MAJOR RESEARCH CONCLUSIONS WHICH RELATE  01554 24
               TO YOUR OWN SELF-CONCEPT.  GIVE SPECIFIC EXAMPLES WHERE 01554 25
               THE CONCLUSION IS ILLUSTRATED IN YOUR LIFE.             01554 26
*FILE          SELF-CONCEPT  SELF                                      01554  9
```

```
*OBJECTIVES    TO SHOW THAT PEOPLE BEHAVE IN TERMS OF WHAT SEEMS TO BE 01555 16
               TRUE+ I, E. WE ALL PERCEIVE THINGS DIFFERENTLY - ACCORDING01555 17
               TO OUR SELF-CONCEPT.                                    01555 18
*PREREQUISITE NONE                                                     01555 19
*EXPERIENCE    SHOW FILM:  [EYE OF THE BEHOLDER[  - 30 MINUTE FILM.    01555 11
               BY SHOWING HOW DIFFERENT PEOPLE DESCRIBE A SERIES OF    01555 12
               INCIDENTS INVOLVING A YOUNG ARTIST, THE FILM ILLUSTRATES 01555 13
               THE FACT THAT PEOPLE OFTEN SEE WHAT THEY WANT TO SEE    01555 14
               OR ARE PREPARED TO SEE RATHER THAT WHAT ACTUALLY EXISTS. 01555 15
*SETTING       LARGE GROUP  COLLEGE                                    01555 10
*MATERIALS     FILM:  EYE OF THE BEHOLDER,  FILM PROJECTOR             01555  5
*LEVEL         ALL GRADES                                              01555  8
*GENERAL       ALL CANDIDATES                                          01555  7
*HOURS         1/2                                                     01555  6
*EVALUATION    TRUE-FALSE QUESTION:  ONE≤S SELF-CONCEPT WILL INFLUENCE 01555 20
               HOW HE PERCEIVES THE ACTIONS OF OTHERS.  ANSWER:  TRUE. 01555 21
*FILE          SELF-CONCEPT  PERCEPTION                                01555  9
```

```
*OBJECTIVES    TO DEMONSTRATE THAT TEACHERS TEACH WHAT THEY ARE, NOT   01556 23
               JUST WHAT THEY SAY.                                     01556 24
*PREREQUISITE NONE.                                                    01556 25
*EXPERIENCE    HAVE TWO FILMS OR VIDEO-TAPES FOR THE CANDIDATE TO VIEW 01556 11
               AND COMPARE:  1ST FILM SHOWS A TEACHER WHO IS [PHONY[.  01556 12
               SHE OR HE WOULD LIKE TO BE OPEN, HAPPY, SPONTANEOUS, -- 01556 13
               IN OTHER WORDS - HIMSELF IN THE CLASSROOM.  BUT IS NOT. 01556 14
               FILM WOULD SHOW THE TEACHER TEACHING A UNIT IN ANY      01556 15
               SUBJECT,  2ND FILM OR VIDEO-TAPE.  SHOWS THE SAME TEACHER 01556 16
               BEING OPEN, HAPPY- OR SAD, WHEN THE OCCASION CALLS FOR  01556 17
               SUCH BEHAVIOR.  THIS FILM SHOWS THE TEACHER TEACHING    01556 18
               THE SAME LESSON BUT THIS TIME IS HERSELF WHEN SHE       01556 19
               TEACHES IT.  THE CANDIDATES ARE THEN ASKED TO EVALUATE  01556 20
               AND DISCUSS THE TEACHING PERFORMANCE OF THE TWO         01556 21
               SITUATIONS.                                             01556 22
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                    01556 10
*MATERIALS     FILM OR VIDEO-TAPE OF TEACHER IN TWO SITUATIONS.        01556  5
*LEVEL         ALL GRADES                                              01556  8
```

```
*GENERAL       ALL CANDIDATES                                         01556  7
*HOURS         1/3                                                    01556  6
*EVALUATION    HAVE EACH CANDIDATE TEACH A SMALL GROUP OF STUDENTS.   01556 26
               HAVE THE CLASS MEMBERS OF EACH CANDIDATE EVALUATE      01556 27
               WHETHER OR NOT THE CANDIDATE [WAS HIMSELF[ IN THE      01556 28
               SITUATION.  GIVE THE FEEDBACK TO THE CANDIDATE AFTER   01556 29
               EACH MICRO-TEACHING SESSION.                           01556 30
*FILE          SELF-CONCEPT  TEACHER PERFORMANCE                      01556  9
```

```
*OBJECTIVES    TO ILLUSTRATE MOTIVATION AND LEARNING THROUGH          01557 22
               SELF-CONCEPT ACHIEVEMENT.                              01557 23
*PREREQUISITE  NONE                                                   01557 24
*EXPERIENCE    SHOW THE FILM:  PASSION FOR LIFE.  IN A SMALL FRENCH   01557 11
               VILLAGE A NEW TEACHER TAKES OVER AN OLD-FASHIONED, VERY 01557 12
               TRADITIONAL SCHOOL.  HIS CREATIVE EDUCATIONAL IDEAS AND 01557 13
               INSIGHT INTO CHILDREN REVOLUTIONIZES CLASSROOM         01557 14
               PROCEEDURES.  ≥FRENCH DIALOGUE WITH ENGLISH TITLES+  AS 01557 15
               THE FILM IS BEING SHOWN, EACH CANDIDATE IS TO INDICATE 01557 16
               EACH 15 MINUTES OR SO, WHAT ARE THE SELF-CONCEPTS OF THE 01557 17
               STUDENTS AND PARTICULARILY ROBERT≤S^  CANDIDATES ARE ALSO 01557 18
               TO SPECIFY HOW THE SELF-CONCEPT OF ROBERT IS CHANGED BY 01557 19
               THE TEACHER.  RESEARCH CONCLUSIONS ABOUT SELF-CONCEPT  01557 20
               AND MOTIVATION CAN BE DISCUSSED FOLLOWING THE FILM.    01557 21
*SETTING       BLANK  COLLEGE                                         01557 10
*MATERIALS     FILM + PROJECTOR:  FILM:  PASSION FOR LIFE.            01557  5
*LEVEL         ALL GRADES                                             01557  8
*GENERAL       ALL CANDIDATES                                         01557  7
*HOURS         1 5/12                                                 01557  6
*EVALUATION    ESSAY:  COMPARE + CONTRAST THE RELATIONSHIP OF THE     01557 25
               SELF-CONCEPT OF ROBERT AND SCHOOL ACHIEVEMENT AT THE   01557 26
               BEGINNING AND AT THE END OF THE FILM, PASSION FOR LIFE. 01557 27
*FILE          MOTIVATION  SELF-CONCEPT                               01557  9
```

```
*OBJECTIVES    TO ILLUSTRATE THE DIFFERENT POPULATION CLASSES.  TO    01558 20
               SHOW THAT APPROXIMATELY 1/4 OF ADULTS AS LOWER CLASS,  01558 21
               1/3 OF ADULTS ARE UPPER LOWER CLASS, 2/5 ARE MIDDLE AND 01558 22
               UPPER CLASS, ETC.                                      01558 23
*PREREQUISITE  NONE                                                   01558 23
*EXPERIENCE    CANDIDATES ARE TO RUN A SURVEY IN SEVERAL AREAS OF TOWN. 01558 11
               CANDIDATES CAN WORK IN PAIRS AND SHOULD RUN THE SURVEY AT 01558 12
               SEVERAL DIFFERENT TIMES SO AS TO INSURE A RANDOM SAMPLE 01558 13
               OF THE POPULATION.  THE SURVEY IS TO DETERMINE THE CLASS 01558 14
               THAT EACH PERSON IS IN.  SPECIFICALLY, THE CANDIDATE   01558 15
               MIGHT ASK EACH PERSON TO CHECK A SURVEY BLANK ASKING FOR 01558 16
               INFORMATION ABOUT THEIR CLASS STANDING.  FOR EXAMPLE:  01558 17
               INCOME AND EDUCATION, OCCUPATION, ETC.  THE RESULTS CAN BE01558 18
               COMPILED IN CLASS AND DISTRIBUTED TO THE CANDIDATES.   01558 19
*SETTING       INDEPENDENT  COMMUNITY                                 01558 10
*MATERIALS     SURVEY BLANKS.                                         01558  5
*LEVEL         ALL GRADES                                             01558  8
*GENERAL       ALL CANDIDATES                                         01558  7
*HOURS         2                                                      01558  6
*EVALUATION    RESULTS OF THE SURVEY CAN BE COMPARED TO OTHER RESULTS 01558 24
               OBTAINED FROM READINGS AND CENSUS ESTIMATES.           01558 25
*FILE          POPULATION  DISADVANTAGED                              01558  9
```

```
*OBJECTIVES    TO SHOW GENERAL CONDITIONS IN DISADVANTAGED AREAS.     01559 15
*PREREQUISITE  NONE                                                   01559 16
```

```
*EXPERIENCE    CANDIDATES SHOULD SEE FILM:  [CHILDREN WITHOUT[.  THIS      01559 11
               FILM SHOWS THE GENERAL CONDITIONS IN DISADVANTAGED          01559 12
               AREAS,  IT ALSO SHOWS WHAT THE SCHOOLS MIGHT DO TO HELP     01559 13
               THE PEOPLE IN THIS AREA.  EXCELLENT FILMv                   01559 14
*SETTING       LARGE GROUP  COLLEGE                                        01559 10
*MATERIALS     FILM:  [CHILDREN WITHOUT[  PROJECTOR                        01559  5
*LEVEL         ALL GRADES                                                  01559  8
*GENERAL       ALL CANDIDATES                                              01559  7
*HOURS         1/2                                                         01559  6
*EVALUATION    TEST.  LIST THE CHARACTERISTICS OF THE HOME AND IMMEDIATE 01559 17
               ENVIRONMENT OF THE FAMILY IN THE FILM [CHILDREN WITHOUT[.  1559 18
*FILE          FILM  DISADVANTAGED  CULTURE                                01559  9
```

```
*OBJECTIVES    FOR CANDIDATE TO NOTE THE GENERAL CHARACTERISTICS OF        01560 15
               DISADVANTAGED AREAS.                                        01560 16
*PREREQUISITE EXPERIENCE MODULE 1559                                       01560 17
*EXPERIENCE    CANDIDATES ARE TO TOUR DISADVANTAGED AREA OF CITY.  THEY    01560 11
               ARE TO NOTE THE GENERAL CONDITIONS OF THE HOMES, CARS,      01560 12
               PLAYGROUNDS, ETC.  WHILE THERE, THEY SHOULD TALK WITH       01560 13
               THE PEOPLE ABOUT GENERAL LIVING CONDITIONS OF THE AREA.     01560 14
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COMMUNITY                      01560 10
*MATERIALS     BLANK                                                       01560  5
*LEVEL         ALL GRADES                                                  01560  8
*GENERAL       ALL CANDIDATES                                              01560  7
*HOURS         2                                                           01560  6
*EVALUATION    WRITTEN COMMENTS BY THE STUDENTS SHOULD BE COLLECTED        01560 18
               AND EXAMINED.                                               01560 19
*FILE          DISADVANTAGED  CULTURE  SOCIAL CONDITION                    01560  9
```

```
*OBJECTIVES    TO COMPARE AND CONTRAST THE SOCIAL, PSYCHOLOGICAL AND       01561 18
               ACADEMIC CHARACTERISTICS OF THE CULTURALLY DISADVANTAGED    01561 19
               WITH THE CULTURALLY ADVANTAGED.                             01561 20
*PREREQUISITE NONE                                                         01561 21
*EXPERIENCE    A PANEL DISCUSSION WITH A SCHOOL COUNSELOR, A VISITING      01561 11
               TEACHER, A SCHOOL SOCIAL WORKER AND THE SCHOOL NURSE        01561 12
               SHOULD BE CONDUCTED FOR THE CANDIDATE.  EACH PANEL MEMBER 01561 13
               SHOULD BE INSTRUCTED TO SPEAK FROM THEIR OWN EXPERIENCES    01561 14
               AS WELL AS COVER THE MAJOR RESEARCH FINDINGS ABOUT THE      01561 15
               CULTURALLY DISADVANTAGED.  TIME FOR OPEN DISCUSSION         01561 16
               SHOULD FOLLOW THE PANEL PRESENTATION.                       01561 17
*SETTING       LARGE GROUP  SCHOOL                                         01561 10
*MATERIALS     NONE                                                        01561  5
*LEVEL         ALL GRADES                                                  01561  8
*GENERAL       ALL CANDIDATES                                              01561  7
*HOURS         1                                                           01561  6
*EVALUATION    GIVE TO THE CANDIDATES A LIST OF CHARACTERISTICS            01561 22
               DESCRIBING BOTH ADVANTAGED AND DISADVANTAGED GROUPS THE     01561 23
               CANDIDATES ARE TO PICK OUT WHICH CHARACTERISTICS            01561 24
               GO WITH EACH GROUP.                                         01561 25
*FILE          DISADVANTAGED  CULTURE  CONDITION                           01561  9
```

```
*OBJECTIVES    FOR THE PROSPECTIVE ELEMENTARY TEACHER TO BE ABLE TO        01562 17
               DISTINGUISH THE LANGUAGE PATTERNS OF DISADVANTAGED          01562 18
               CHILDREN FROM ADVANTAGED CHILDREN.                          01562 19
*PREREQUISITE NONE                                                         01562 20
*EXPERIENCE    THE CANDIDATES ARE TO VISIT AND OBSERVE THE LANGUAGE        01562 11
               PATTERNS AT BOTH A HEAD-START NURSERY AND A DAY NURSERY     01562 12
               FOR OTHER CHILDREN ≥PREFERABLY ONE IN WHICH THE CHILDREN    01562 13
               HAVE MANY ADVANTAGES AT HOME↑.  THE CANDIDATES ARE TO         01562 14
               RECORD ON AUDIO-TAPE. THE CONVERSATION OF THE CHILDREN        01562 15
               FOR LATER ANALYSIS.                                           01562 16
*SETTING       INDEPENDENT  COMMUNITY                                        01562 10
*MATERIALS     BLANK                                                         01562  5
*LEVEL         ALL GRADES                                                    01562  8
*GENERAL       ALL CANDIDATES                                                01562  7
*HOURS         1                                                             01562  6
*EVALUATION    EACH CANDIDATE WILL BE ASKED TO ROLE-PLAY THE CHILD           01562 21
               IN A DISADVANTAGED AS WELL AS AN ADVANTAGED SITUATION.        01562 22
               THE INSTRUCTOR WILL EVALUATE THE RESULTS.                     01562 23
*FILE          DISADVANTAGED  CULTJRE  CHILDREN≤S CONVERSATION               01562  9

*OBJECTIVES    FOR THE PROSPECTIVE ELEMENTARY TEACHER TO BE ABLE             01563 17
               SUMMARIZE THE RESEARCH CONCLUSIONS RELATED TO LANGUAGE        01563 18
               PATTERNS OF DISADVANTAGED CHILDREN.                           01563 19
*PREREQUISITE  NONE                                                          01563 20
*EXPERIENCE    EACH PROSPECTIVE ELEMENTARY TEACHER IS TO GO TO THE           01563 11
               LIBRARY AND READ ONE ARTICLE ON THE LANGUAGE PATTERNS OF      01563 12
               DISADVANTAGED YOUTH.  EACH CANDIDATE IS TO SUMMARIZE THE      01563 13
               ARTICLE AND MAKE A COPY OF THE MAJOR CONCLUSION ≥A↑ ON A      01563 14
               TRANSPARENTY TO BE USED WITH AN OVERHEAD PROJECTOR.  ALL      01563 15
               CANDIDATES CAN THEN HAVE A COPY OF THE CONCLUSION.            01563 16
*SETTING       INDEPENDENT  COMMUNITY                                        01563 10
*MATERIALS     OVER HEAD PROJECTOR,  COPY MACHINE FOR TRANSPARENCIES         01563  5
*LEVEL         ALL GRADES                                                    01563  8
*GENERAL       ALL CANDIDATES                                                01563  7
*HOURS         1/2                                                           01563  6
*EVALUATION    CANDIDATE WILL BE ASKED TO LIST THE MAJOR CONCLUSIONS         01563 21
               RELATED TO THE LANGJAGE PATTERNS OF DISADVANTAGED YOUTH.      01563 22
*FILE          LANGUAGE  CULTURALLY DISADVANTAGED                            01563  9

*OBJECTIVES    FOR THE PROSPECTIVE ELEMENTARY TEACHER TO BE ABLE TO          01564 20
               DISTINGUISH THE ATTENTION SPAN, THE LEVEL OF CURIOSITY,       01564 21
               THE RANGE OF EXPERIENCES, AND THE GENERAL LEARNING            01564 22
               PATTERNS OF THE DISADVANTAGED CHILDREN.                       01564 23
*PREREQUISITE  NONE                                                          01564 24
*EXPERIENCE    THE PROSPECTIVE CANDIDATES ARE TO GO IN PAIRS AND             01564 11
               INTERVIEW THE TEACHERS IN A DISADVANTAGED AREA.  THE          01564 12
               INTERVIEW IS TO CENTER ON THE LEARNING DIFFICULTIES OF        01564 13
               THE DISADVANTAGED CHILDREN.  FOR EXAMPLE:  WHAT IS THE        01564 14
               LENGTH OF ATTENTION SPAN FOR DISADVANTAGED CHILDREN^          01564 15
               HOW DOES THE LEVEL OF CURIOSITY OF THESE CHILDREN             01564 16
               COMPARE WITH THAT OF MIDDLE CLASS CHILDREN^  WHAT             01564 17
               EXPERIENCES DO THESE CHILDREN HAVE OUTSIDE OF SCHOOL          01564 18
               WHICH HELP THEM IN SCHOOL^                                    01564 19
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑ SCHOOL                            01564 10
*MATERIALS     NONE                                                          01564  5
*LEVEL         ALL GRADES                                                    01564  8
*GENERAL       ALL CANDIDATES                                                01564  8
*HOURS         1                                                             01564  6
*EVALUATION    THE CANDIDATES CAN BE ASKED TO LIST CONCLUSIONS ABOUT         01564 25
               THE LEARNING DIFFICULTIES OF DISADVANTAGED CHILDREN.          01564 26
*FILE          INTERVIEW  CULTURALLY DISADVANTAGED  LEARNING                 01564  9

*OBJECTIVES    TO BE ABLE TO LIST THE FACTORS RELATED TO READINESS TO        01565 15
               LEARNING.                                                     01565 16
*PREREQUISITE  NONE                                                          01565 17
```

```
*EXPERIENCE     CANDIDATES ARE TO READ AND SUMMARIZE:  TYLER, FRED. T.      01565 11
                [ISSUES RELATED TO READINESS TO LEARN.[  THEORIES OF        01565 12
                LEARNING AND INSTRUCTION  ED. BY ERNEST R. HIGARD.          01565 13
                NSSE YEARBOOK, 1964.  P. 210 - 240                          01565 14
*SETTING        INDEPENDENT  COLLEGE                                        01565 10
*MATERIALS      BLANK                                                       01565  5
*LEVEL          ALL GRADES                                                  01565  8
*GENERAL        ALL CANDIDATES                                              01565  7
*HOURS          1                                                           01565  6
*EVALUATION     WHEN DOES TYLER SAY IS THE [TIME TO TEACH[ A YOUNGSTER.     01565 18
                LIST THE SIGNIFACTORS DISCUSSED IN HIS ARTICLE.             01565 19
*FILE           DISADVANTAGED  READINESS                                    01565  9
```

```
*OBJECTIVES     FOR THE PROSPECTIVE ELEMENTARY TEACHER TO RECALL            01566 17
                INSTRUCTIONAL APPROACHES FOR THE DISADVANTAGED.             01566 18
*PREREQUISITE NONE                                                          01566 19
*EXPERIENCE     BRING IN THREE TEACHERS OF THE DISADVANTAGED.  ONE FOR      01566 11
                PRE-SCHOOL-K+ ONE FOR GRADES 1-4, AND ONE FOR GRADES        01566 12
                5-8.  HAVE EACH TEACHER STATE WHAT INSTRUCTIONAL            01566 13
                APPROACHES THEY USE TO TEACH THE DISADVANTAGED.             01566 14
                SUPLIMENT EACH PRESENTATION WITH A VIDEO-TAPE OF THAT       01566 15
                TEACHER ACTUALLY DOING WHAT SHE SAYS SHOULD BE DONE.        01566 16
*SETTING        LARGE GROUP  SCHOOL                                         01566 10
*MATERIALS      VIDEO-TAPE RECORDER+  T-V SETS.                             01566  5
*LEVEL          ALL GRADES                                                  01566  8
*GENERAL        ALL CANDIDATES                                              01566  7
*HOURS          1                                                           01566  6
*EVALUATION     EACH CANDIDATE WILL BE ASKED TO TEACH A SMALL UNIT IN A     01566 20
                DISADVANTAGED AREA.  THIS MAY BE DONE WITH THE ACTUAL       01566 21
                CHILDREN OR IF THAT IS NOT POSSIBLE, THE CANDIDATE CAN      01566 22
                ROLE-PLAY THE SITUATION IN CLASS.                           01566 23
*FILE           VIDEO-TAPE  INSTRUCTIONAL APPROACHES  DISADVANTAGED         01566  9
```

```
*OBJECTIVES     FOR THE PROSPECTIVE ELEMENTARY TEACHER TO SUMMARIZE THE     01567 19
                RESEARCH CONCLUSIONS REGARDING SPECIFIC PRACTICES FOUND     01567 20
                TO BE MOST EFFECTIVE TEACHING THE DISADVANTAGED.            01567 21
*PREREQUISITE MODULES 1560 THROUGH 1566                                     01567 22
*EXPERIENCE     WORKING IN TEAMS OF 3 TO 5 MEMBERS, THE CANDIDATES ARE TO 01567 11
                CREATE A VISUAL PRESENTATION OF THE RESEARCH CONCLUSION     01567 12
                REGARDING SPECIFIC PRACTICES FOUND TO BE EFFECTIVE FOR      01567 13
                TEACHING DISADVANTAGED CHILDREN.  THE VISUAL PRESENTATION 01567 14
                MAY TAKE ANY FORM+ SUCH AS+ ROLE-PLAYING, A DISPLAY+        01567 15
                VISUALS+ FILMS, ETC.  THE REQUIREMENT IS THAT EACH          01567 16
                PRESENTATION SUMMARIZES THE RESEARCH CONCLUSIONS ABOUT      01567 17
                THIS TOPIC.                                                 01567 18
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                        01567 10
*MATERIALS      BLANK                                                       01567  5
*LEVEL          ALL GRADES                                                  01567  8
*GENERAL        ALL CANDIDATES                                              01567  7
*HOURS          1                                                           01567  6
*EVALUATION     THE INSTRUCTOR CAN EVALUATE THE VISUAL PRESENTATION OF      01567 23
                EACH GROUP TO DETERMINE WHETHER THE CANDIDATES HAVE         01567 24
                ACHIEVED THIS OBJECTIVE.                                    01567 25
*FILE           DISADVANTAGED  CULTURE  LEARNING                            01567  9
```

```
*OBJECTIVES     TO BE ABLE TO RECALL RESEARCH CONCLUSIONS RELATED TO THE    01568 16
                LEARNING PATTERNS OF DISADVANTAGED CHILDREN.                01568 17
*PREREQUISITE  NONE                                                         01568 18
```

```
*EXPERIENCE    EACH PROSPECTIVE TEACHER CANDIDATE IS TO READ AND          01568 11
               SUMMARIZE DEUTSCH, CYNTHIA P., [LEARNING IN THE            01568 12
               DISADVANTAGED]. CHAPTER 12 IN ANALYSIS OF CONCEPT          01568 13
               LEARNING. EDITED BY KLAUSMUCI AND HARRIS, ACADEMIC PRESS*01568 14
               NEW YORK: 1966.                                            01568 15
*SETTING       INDEPENDENT  COLLEGE                                       01568 10
*MATERIALS     NONE                                                       01568  5
*LEVEL         ALL GRADES                                                 01568  8
*GENERAL       ALL CANDIDATES                                             01568  7
*HOURS         BLANK                                                      01568  6
*EVALUATION    LIST AND DISCUSS 5 MAJOR CONCLUSIONS RELATED TO THE        01568 19
               LEARNING PATTERNS OF THE DISADVANTAGED CHILDREN.           01568 20
*FILE          CONCEPT LEARNING  DISADVANTAGED  CULTURE                   01568  9

*OBJECTIVES    FOR THE CANDIDATES TO BE ABLE TO EVALUATE THE IMPORTANCE   01569 18
               OF ADEQUATE PHYSICAL COMFORT AS A PREREQUISITE TO          01569 19
               LEARNING.                                                  01569 20
*PREREQUISITE  NONE                                                       01569 21
*EXPERIENCE    IN ORDER TO UNDERSTAND WHY ADEQUATE FOOD AND REST ARE      01569 11
               PREREQUISITES TO LEARNING, THE CANDIDATES ARE ASKED TO     01569 12
               FAST FOR 24 HOURS PRIOR TO CLASS TIME.  THE INSTRUCTOR     01569 13
               SHOULD THEN ROLE-PLAY WHAT MIGHT BE A TYPICAL              01569 14
               DISADVANTAGED CLASSROOM TAUGHT BY A MIDDLE CLASS TEACHER. 01569 15
               THE CANDIDATES ARE THEN ASKED TO DISCUSS THEIR LEVEL OF   01569 16
               INTEREST IN THE TOPIC UNDER THESE CONDITIONS.              01569 17
*SETTING       INDEPENDENT  COLLEGE                                       01569 10
*MATERIALS     NONE                                                       01569  5
*LEVEL         ALL GRADES                                                 01569  8
*GENERAL       ALL CANDIDATES                                             01569  7
*HOURS         24                                                         01569  6
*EVALUATION    ASK EACH CANDIDATE TO SUMMARIZE THE RELATIONSHIP BETWEEN  01569 22
               ADEQUATE FOOD AND LEARNING.                                01569 23
*FILE          CULTURE  DISADVANTAGED  LEARNING                           01569  9

*OBJECTIVES    FOR PROSPECTIVE ELEMENTARY TEACHERS TO COMPREHEND THE      01570 15
               RELATIONSHIP BETWEEN DELINQUENCY AND THE CULTURALLY        01570 16
               DISADVANTAGED.                                             01570 17
*PREREQUISITE  NONE                                                       01570 18
*EXPERIENCE    INVITE ONE OR MORE OF THE FOLLOWING TO SPEAK ON THE TOPIC 01570 11
               OF YOUTH DELINQUENCY AND THE DISADVANTAGED YOUTH:          01570 12
               1. JUDGE OF PROBATE COURT.  2. JUDGE OF A YOUTH COURT.     01570 13
               3. JUVENILE OFFICER IN THE CITY.                           01570 14
*SETTING       LARGE GROUP  COLLEGE                                       01570 10
*MATERIALS     NONE                                                       01570  5
*LEVEL         ALL GRADES                                                 01570  8
*GENERAL       ALL CANDIDATES                                             01570  7
*HOURS         1                                                          01570  6
*EVALUATION    THE CANDIDATES CAN BE ASKED TO SUMMARIZE THE LECTURE       01570 19
               GIVEN BY THE SPEAKER ON THIS TOPIC.                        01570 20
*FILE          DISADVANTAGED  DELINQUENCY  CULTURE                        01570  9

*OBJECTIVES    FOR THE TEACHER CANDIDATE TO BE ABLE TO RECALL THE         01571 16
               EXTENT OF MENTAL HEALTH PROBLEM AMONG ELEMENTARY STUDENTS.01571 17
*PREREQUISITE  NONE                                                       01571 18
*EXPERIENCE    A SCHOOL PSYCHOLOGIST WILL PRESENT A LECTURE ON THE TOPIC 01571 11
               OF [THE EXTENT OF THE MENTAL HEALTH PROBLEM AMONG          01571 12
               ELEMENTARY STUDENTS.[  INCLUDED IN THIS PRESENTATION WILL 01571 13
               BE THE COMMON PROBLEMS FACED BY ELEMENTARY SCHOOL CHILDREN01571 14
               AND REASONS FOR REFERRAL BY TEACHERS.                      01571 15
*SETTING       LARGE GROUP  COLLEGE                                       01571 10
*MATERIALS     NONE                                                       01571  5
*LEVEL         ALL GRADES                                                 01571  8
*GENERAL       ALL CANDIDATES                                             01571  7
*HOURS         1                                                          01571  6
*EVALUATION    THE CANDIDATES CAN BE ASKED TO RECALL THE MAJOR            01571 19
               CONCLUSIONS AND FACTS PRESENTED BY THE SCHOOL              01571 20
               PSYCHOLOGISTS.                                             01571 21
*FILE          MENTAL HEALTH   MALADJUSTMENT                              01571  9
```

```
*OBJECTIVES    FOR CANDIDATE TO BE ABLE TO IDENTIFY FACTORS WHICH ARE     01572 18
               INDICATIVE AND/OR SYMTOMATIC OF POSSIBLE MALADJUSTMENT.    01572 19
*PREREQUISITE NONE                                                        01572 20
*EXPERIENCE    CANDIDATES WILL VISIT A MENTAL HEALTH CLINIC OR CHILD      01572 11
               GUIDANCE CLINIC AND TALK WITH THE STAFF ABOUT THE          01572 12
               BEHAVIORS WHICH ARE INDICATIVE OF POSSIBLE MALADJUSTMENT.  01572 13
               IT IS HOPED THAT THE CANDIDATES WILL BE ABLE TO OBSERVE    01572 14
               CHILDREN IN THE CLINIC WHO ARE THERE FOR TREATMENT.        01572 15
               SPECIFIC CASES WHICH ARE OBSERVED CAN BE DISCUSSED BY THE  01572 16
               PSYCHOLOGISTS AT THE CLINIC.                               01572 17
*SETTING       SMALL GROUP ≥1-12 STUDENTS†  COMMUNITY                     01572 10
*MATERIALS     NONE                                                       01572  5
*LEVEL         ALL GRADES                                                 01572  8
*GENERAL       ALL CANDIDATES                                             01572  7
*HOURS         1                                                          01572  6
*EVALUATION    CANDIDATES WILL BE ASKED TO LIST THE FACTORS OR            01572 21
               BEHAVIORAL PATTERNS WHICH ARE INDICATIVE OF POSSIBLE       01572 22
               MALADJUSTMENT.                                             01572 23
*FILE          MENTAL HEALTH  MALADJUSTMENT  CHILD GUIDANCE               01572  9
```

```
*OBJECTIVES    FOR THE CANDIDATES TO BE ABLE TO LIST THE CRITERIA FOR     01573 18
               WHEN TEACHERS SHOULD ACTIVELY INTERFERE WITH BEHAVIOR.     01573 19
*PREREQUISITE NONE                                                        01573 20
*EXPERIENCE    THE CANDIDATES ARE TO BE DIVIDED INTO GROUPS OF ABOUT      01573 11
               10 STUDENTS EACH.  EACH GROUP IS THEN TO HAVE A BUSY       01573 12
               SESSION OR AN IDEA SESSION WHEREIN ALL POSSIBLE CRITERIA   01573 13
               FOR WHEN TEACHERS SHOULD ACTIVELY INTERFERE WITH BEHAVIOR  01573 14
               IS DISCUSSED.  EACH GROUP IS TO HAVE A RECORDING SECRETARY01573 15
               FOR RECORDING THE IDEAS.  A COMPOSITE LIST CAN BE COMPILED01573 16
               AND DISTRIBUTED TO THE STUDENTS THE NEXT DAY.              01573 17
*SETTING       SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                       01573 10
*MATERIALS     NONE                                                       01573  5
*LEVEL         ALL GRADES                                                 01573  8
*GENERAL       ALL CANDIDATES                                             01573  7
*HOURS         1                                                          01573  6
*EVALUATION    ASK THE CANDIDATES TO LIST SEVEN CRITERIA FOR WHEN         01573 21
               TEACHERS SHOULD ACTIVELY INTERFERE WITH BEHAVIOR.          01573 22
*FILE          DISCIPLINE  MENTAL HEALTH  GROUP BEHAVIOR                  01573  9
```

```
*OBJECTIVES    TO HAVE THE PROSPECTIVE ELEMENTARY TEACHER BE ABLE TO      01574 16
               LIST INFLUENCE TECHNIQUES TO HELP MANAGE SURFACE BEHAVIOR.01574 17
*PREREQUISITE NONE                                                        01574 18
*EXPERIENCE    EACH CANDIDATE IS TO READ AND MAKE NOTATION ON THE 13TH    01574 11
               CHAPTER OF REDL AND WATTENBERGSS TEXT:  MENTAL HYGIENE IN  01574 12
               TEACHING:  SECOND EDITION,  HARCOURT, BRACE + WORLD INC.,  01574 13
               NEW YORK:  1959.  THIS CHAPTER IS ON [INFLUENCE            01574 14
               TECHNIQUES.                                                01574 15
```

```
*SETTING       INDEPENDENT  COLLEGE                                    01574 10
*MATERIALS     TEXT:  MENTAL HYGIENE IN TEACHING, BY FRITZ REDL +      01574  5
               WILLIAM WATTENBERG.                                     01574
*LEVEL         ALL GRADES                                              01574  8
*GENERAL       ALL CANDIDATES                                          01574  7
*HOURS         1                                                       01574  6
*EVALUATION    CANDIDATES ARE TO LIST AND RECALL THE INFLUENCE         01574 19
               TECHNIQUES DISCUSSED BY REDL + WATTENBERG IN THEIR BOOK 01574 20
               [MENTAL HYGIENE IN TEACHING.                            01574 21
*FILE          DISCIPLINE  MENTAL HEALTH  INFLUENCE TECHNIQUES         01574  9
```

```
*OBJECTIVES    FOR THE CANDIDATES TO BE ABLE TO DEMONSTRATE THE INFLUENCE01575 18
               TECHNIQUES FOR CONTROLLING BEHAVIOR.                    01575 19
*PREREQUISITE  EXPERIENCE MODULE 1574                                  01575 20
*EXPERIENCE    AFTER THE CANDIDATES HAVE READ THE INFLUENCE TECHNIQUES 01575 11
               OUTLINED IN EXPERIENCE MODULE 1574, EACH CANDIDATE IS TO 01575 12
               CHOOSE ONE TECHNIQUE AND ROLE PLAY IT BEFORE THEIR      01575 13
               CLASSMATES.  THE CLASSMATES ARE TO TRY AND [GUESS[ WHICH 01575 14
               INFLUENCE TECHNIQUE IT IS.  FOLLOWING THE IDENTIFICATION 01575 15
               OF THE TECHNIQUE, A DISCUSSION SHOULD CENTER ON THE     01575 16
               EFFECTIVENESS OF THAT TECHNIQUE.                        01575 17
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  BLANK                      01575 10
*MATERIALS     NONE                                                    01575  5
*LEVEL         ALL GRADES                                              01575  8
*GENERAL       ALL CANDIDATES                                          01575  7
*HOURS         1                                                       01575  6
*EVALUATION    AS THE CANDIDATES ARE DEMONSTRATING THE TECHNIQUES, THE 01575 21
               INSTRUCTOR CAN EVALJATE THE PERFORMANCE OF EACH CANDIDATE.01575 22
*FILE          DISAPLINE  MENTAL HEALTH  INFLUENCE TECHNIQUES          01575  9
```

```
*OBJECTIVES    FOR THE CANDIDATES TO SUMMARIZE THE RESEARCH CONCLUSIONS 01576 21
               RELATED TO THE USE OF PUNISHMENT.                       01576 22
*PREREQUISITE  NONE                                                    01576 23
*EXPERIENCE    EACH CANDIDATE IS TO READ AND BE ABLE TO SUMMARIZE THE  01576 11
               FOLLOWING:  1. CUTTS, NORMA E. AND NICHOLAS MOSELEY.    01576 12
               TEACHING THE DISORDERLY PUPIL.  NEW YORK:  LONGMANS,    01576 13
               GREEN.  1957 CHAPTER 3.  THIS CHAPTER DEALS SPECIFICALLY 01576 14
               WITH THE PROBLEM OF USING PUNISHMENT ON TROUBLESOME     01576 15
               CHILDREN.  2. ASSOCIATION FOR SUPERVISION AND CURRICULUM 01576 16
               DEVELOPMENT, N. E. A. 1950 YEARBOOK:  FOSTERING MENTAL  01576 17
               HEALTH IN OUR SCHOOLS.  WASHINGTON:  N. E. A. 1950.     01576 18
               CHAPTER 11 + 18.  THESE CHAPTERS DEAL WITH REWARD,      01576 19
               PUNISHMENT AND TECHNIQUES FOR CONTROLLING BEHAVIOR.     01576 20
*SETTING       INDEPENDENT  COLLEGE                                    01576 10
*MATERIALS     BOOKS MENTIONED ABOVE.                                  01576  5
*LEVEL         ALL GRADES                                              01576  8
*GENERAL       ALL CANDIDATES                                          01576  7
*HOURS         1                                                       01576  6
*EVALUATION    WHAT ARE THE MAJOR GUIDE LINES FOR THE USE OF PUNISHMENT 01576 24
               AS A TECHNIQUE FOR CONTROLLING BEHAVIOR ACCORDING TO THE 01576 25
               ABOVE READINGS^                                         01576 26
*FILE          PUNISHMENT  DISCIPLINE  MENTAL HEALTH                   01576  9
```

```
*OBJECTIVES    FOR THE CANDIDATES TO BE ABLE TO SPECIFY DIFFERENT METHODS01577 17
               OF STUDYING A STUDENT≤S MENTAL HEALTH.                  01577 18
*PREREQUISITE  NONE                                                    01577 19
*EXPERIENCE    CANDIDATES ARE TO OBSERVE STUDENTS IN INFORMAL SETTINGS 01577 11
               AND RECORD THE BEHAVIORS THEY OBSERVE ON FILM:  ≥MOVIE OR 01577 12
               SLIDES+.  EACH FILM OR SLIDE IS IS TO BE SUPPLIMENTED       01577 13
               WITH A SCRIPT OF WHAT WAS OBSERVED.  THE RELATIONSHIP OF    01577 14
               THIS METHOD OF STUDYING CHILDREN AND MENTAL HEALTH CAN BE   01577 15
               DISCUSSED FOLLOWING THE PRESENTATION OF THE FILMS.          01577 16
*SETTING       INDEPENDENT  SCHOOL                                         01577 10
*MATERIALS     MOVIE FILM, PROJECTOR CAMERA                                01577  5
*LEVEL         ALL GRADES                                                  01577  8
*GENERAL       ALL CANDIDATES                                              01577  7
*HOURS         1                                                           01577  6
*EVALUATION    ASK THE STUDENTS TO LIST NECESSARY INGREDIENTS FOR          01577 21
               STUDYING AN INDIVIDUAL CHILD.  INCLUDED IN THIS LIST        01577 22
               SHOULD BE INFORMAL PLAY PERIODS.                            01577 23
*FILE          MENTAL HEALTH  OBSERVATION TECHNIQUES                       01577  9

*OBJECTIVES    FOR CANDIDATES TO BE ABLE TO SPECIFY DIFFERENT METHODS OF   01578 21
               STUDYING A STUDENT≤S MENTAL HEALTH.                         01578 22
*PREREQUISITE  MODULE 1577                                                 01578 23
*EXPERIENCE    EACH CANDIDATE IS TO COMPLETE THE FOLLOWING                 01578 11
               SELF-EXPRESSIVE TECHNIQUE:  ≥A+ THEY ARE TO DO CREATIVE     01578 12
               WRITING ON THEMES WHICH HAVE EMOTIONAL OVERTONES:  I.E.,    01578 13
               [HOW I FEEL ABOUT MYSELF.[  ≥B+ OPEN ENDED QUESTIONS:       01578 14
               [I WISH,[ OR [I DISPISE[ OR [I NEED[  ≥C+ UNFINISHED        01578 15
               STORIES:  AS THE CANDIDATES TO WRITE THEIR OWN              01578 16
               CONCLUSIONS TO [UNFINISHED STORIES.  RANDOMLY SELECT        01578 17
               SEVERAL AND WITHOUT REVEALING IDENTITY, ANALYZE THEM FOR    01578 18
               THE CLASS.  THE INSTRUCTOR SHOULD EMPHASIZE HOW THESE CAN   01578 19
               BE USED IN STUDYING INDIVIDUALS MENTAL HEALTH.              01578 20
*SETTING       LARGE GROUP  COLLEGE                                        01578 10
*MATERIALS     NONE                                                        01578  5
*LEVEL         ALL GRADES                                                  01578  8
*GENERAL       ALL CANDIDATES                                              01578  7
*HOURS         1                                                           01578  6
*EVALUATION    LIST SEVERAL WAYS IN WHICH A TEACHER CAN EXAMINE A          01578 24
               STUDENTS MENTAL HEALTH, THEIR SELF-EXPRESSIVE TECHNIQUES.   01578 25
*FILE          MENTAL HEALTH  SELF-EXPRESSION TECHNIQUES                   01578  9

*OBJECTIVES    FOR CANDIDATES TO BE ABLE TO USE SOCIOMETRIC DEVICES FOR    01579 15
               STUDYING RELATIONSHIP OF CHILDREN.                          01579 16
*PREREQUISITE  NONE                                                        01579 17
*EXPERIENCE    EACH CANDIDATE IS TO ADMINISTER A SOCIOGRAM TO A CLASS IN   01579 11
               THE ELEMENTARY SCHOOLS.  THE RESULTS OF THE SOCIOGRAM ARE   01579 12
               TO BE DIAGRAMED FOR THE OTHER STUDENTS SO SOCIAL            01579 13
               RELATIONSHIPS IN THE CLASS CAN BE EXAMINED.                 01579 14
*SETTING       INDEPENDENT  SCHOOL                                         01579 10
*MATERIALS     NONE                                                        01579  5
*LEVEL         ALL GRADES                                                  01579  8
*GENERAL       ALL CANDIDATES                                              01579  7
*HOURS         1                                                           01579  6
*EVALUATION    EXAMINATION OF THE RESULTS OF THE SOCIOGRAM CAN DETERMINE   01579 18
               WHETHER OR NOT THE STUDENT HAS ACHIEVED THIS OBJECTIVE.     01579 19
*FILE          SOCIOGRAM  MENTAL HEALTH  SOCIAL RELATIONSHIPS              01579  9

*OBJECTIVES    TO DEMONSTRATE QUESTIONS TO ASK WHEN STUDYING INDIVIDUAL    01580 17
               STUDENTS ABOUT THEIR MENTAL HEALTH.                         01580 18
*PREREQUISITE  NONE                                                        01580 19
*EXPERIENCE    HAVE A VIDEO TAPE OF A SUCCESSFUL CONSELOR OR PSYCHOLOGIST  01580 11
               INTERVIEWING A STUDENT WHO HAS A MENTAL HEALTH PROBLEM.     01580 12
               THE STUDENTS ARE TO NOTE THE SIGNIFICANT QUESTIONS ASKED    01580 13
               BY THE PSYCHOLOGIST DURING THE INTERVIEW.  THE VIDEO-TAPE   01580 14
               MAY BE STOPPED WHEN QUESTIONS ARISE FROM THE PROSPECTIVE    01580 15
               ELEMENTARY TEACHERS.                                        01580 16
*SETTING       LARGE GROUP  SCHOOL                                         01580 10
*MATERIALS     VIDEO-TAPE MACHINE                                          01580  5
```

```
*LEVEL         BLANK                                                 01580  8
*GENERAL       BLANK                                                 01580  7
*HOURS         1                                                     01580  6
*EVALUATION    WHAT ARE 7 SIGNIFICANT QUESTIONS TO ASK IN AN INTERVIEW  01580 20
               ABOUT THE STUDENT≤S MENTAL HEALTH^                    01580 21
*FILE          MENTAL HEALTH  SELF  INTERVIEW TECHNIQUES             01580  9

*OBJECTIVES    TO DEMONSTRATE THE RELATIONSHIP BETWEEN GROUP LIFE AND   01581 19
               CLASSROOM DISCIPLINE.                                 01581 20
*PREREQUISITE  NONE                                                  01581 21
*EXPERIENCE    PROSPECTIVE ELEMENTARY TEACHER CANDIDATES ARE TO SEE THE  01581 11
               FILM:  [EXPERIMENTAL STUDIES IN THE SOCIAL CLIMATE OF    01581 12
               GROUP,[  ≥30 MINUTES+  THIS IS A DEMONSTRATION OF LEWIN,  01581 13
               LIPPITT, AND WHITE≤S EXPERIMENT WITH LEADERSHIP.  IT SHOWS01581 14
               THE RESPONSES OF GROUPS OF BOYS TO AUTOCRATIC, DEMOCRATIC 01581 15
               AND LAISSEZ-FAIRE LEADERS.  CANDIDATES ARE TO NOTE THE    01581 16
               RESPONSES OF THE GROUPS AND THE RELATIONSHIP OF THESE     01581 17
               RESPONSES TO DISCIPLINE.                              01581 18
*SETTING       LARGE GROUP  COLLEGE                                  01581 10
*MATERIALS     FILM + PROJECTOR                                      01581  5
*LEVEL         ALL GRADES                                            01581  8
*GENERAL       ALL CANDIDATES                                        01581  7
*HOURS         1/2                                                   01581  6
*EVALUATION    COMPARE AND CONTRAST THE DISCIPLINE TECHNIQUES WHICH ARE  01581 22
               NECESSARY TO BE USED IN THE AUTOCRATIC, THE DEMOCRATIC AND01581 23
               THE LAISSEZ-FAIRE GROUPS.                             01581 24
*FILE          GROUP LIFE  DISCIPLINE                                01581  9

*OBJECTIVES    FOR PROSPECTIVE ELEMENTARY TEACHERS TO BE ABLE TO     01582 19
               SUMMARIZE THE MAJOR DIFFERENCES BETWEEN A TEACHER-CENTERED01582 20
               AND A STUDENT-CENTERED CLASSROOM.                     01582 21
*PREREQUISITE  NONE                                                  01582 22
*EXPERIENCE    USING FLANDERS, INTERACTION ANALYSIS, TWO CLASSROOMS ARE  01582 11
               TO BE IDENTIFIED AND PUT ON VIDEO-TAPE.  ONE CLASSROOM IS 01582 12
               IS TO BE TEACHER-CENTERED, THE OTHER STUDENT-CENTERED.  AS01582 13
               THE TAPES ARE BEING SHOWN, EACH CANDIDATE IS TO NOTE THE  01582 14
               INTERACTION ≥VERBAL AS WELL AS NON-VERBAL+ BETWEEN THE    01582 15
               TEACHER AND THE STUDENTS.  FOLLOWING THE SHOWING OF THE   01582 16
               TAPES, A DISCUSSION SHOULD FOLLOW CENTERED ON THE         01582 17
               DIFFERENCES AND SIMILARITIES BETWEEN THE TWO CLASSROOMS.  01582 18
*SETTING       LARGE GROUP  COLLEGE                                  01582 10
*MATERIALS     BLANK                                                 01582  5
*LEVEL         ALL GRADES                                            01582  8
*GENERAL       ALL CANDIDATES                                        01582  7
*HOURS         1                                                     01582  6
*EVALUATION    EACH PROSPECTIVE ELEMENTARY TEACHER IS TO TURN IN A   01582 23
               SUMMARY OF THE MAJOR DIFFERENCES BETWEEN A TEACHER    01582 24
               CENTERED AND A STUDENT CENTERED CLASSROOM.            01582 25
*FILE          INTERACTION ANALYSIS  TEACHER-CENTERED CLASSROOMS     01582  9

*OBJECTIVES    TO ILLUSTRATE FOR THE PROSPECTIVE ELEMENTARY TEACHER, THE 01583 14
               PROBLEMS AND MENTAL HEALTH CONDITIONS OF TEACHERS     01583 15
*PREREQUISITE  NONE                                                  01583 16
*EXPERIENCE    EACH CANDIDATE SHOULD READ ARTHUR T, JERSILD≤S BOOK,  01583 11
               [WHEN TEACHERS FACE THEMSELVES.  THIS BOOK SKETCHES THE   01583 12
               EMOTIONAL FACTORS IN THE LIVES OF TEACHERS.           01583 13
*SETTING       INDEPENDENT  COLLEGE                                  01583 10
*MATERIALS     BOOK:  WHEN TEACHERS FACT THEMSELVES, BY ARTHUR JERSILD.  01583  5
*LEVEL         ALL GRADES                                            01583  8
*GENERAL       ALL CANDIDATES                                        01583  7
*HOURS         2-3                                                   01583  6
*EVALUATION    BRIEFLY OUTLINE WHAT JERSILD SAYS ABOUT TEACHER≤S MENTAL  01583 17
               HEALTH IN HIS BOOK [WHEN TEACHERS FACE THEMSELVES[.   01583 18
*FILE          TEACHERS  MENTAL HEALTH                               01583  9
```

BEHAVIORAL SCIENCE STUDY FOCUSED UPON
SOCIAL-PHILOSOPHICAL FOUNDATIONS OF EDUCATION

Table of Contents

I. THE INDIVIDUAL AND THE SCHOOL VII-209

  A. The individual and the purpose of education in a contemporary society: three views VII-209
  B. The school and individual freedom VII-209

II. AMERICAN SOCIETY AND ITS SCHOOLS VII-209

  A. Contemporary society and the functions of education . VII-209
  B. Contemporary views on the nature of education authority VII-209
  C. Church-state relationships and educational authority: the nature of the problem VII-210
  D. The role of the federal government in education . . . VII-210
  E. The teacher in a bureaucratic society: the limits of educational authority VII-210

III. THE PROFESSIONAL IN A DEMOCRATIC SOCIETY VII-210

  A. What sets of criteria underlie the various concepts of professionalism VII-210
  B. To what extent does education meet these criteria . . VII-210
  C. Teacher evaluation: who is responsible VII-210
  D. Strikes, sanctions, and teacher organizations: should VII-210
  professionals strike or withhold their services . . . VII-210
  E. Recent and contemporary legislation concerning education in Michigan VII-210

IV. THE SOCIAL ASPECTS OF THE TEACHING-LEARNING ACTIVITY . . . VII-210

  A. Individual differences are multi-faceted and change with time VII-210
  B. The self-concept is a social phenomenon VII-211
  C. Self-concept influences the individual's social development VII-211
  D. The group serves as a learning experience for each individual by giving him feedback to his actions . . . VII-211
  E. The group effects upon the individual VII-212
  F. Procedures for observing group behavior VII-212
  G. Working with groups VII-212
  H. The structural organization of the classroom VII-213

V. THE SCHOOL AS A SOCIAL INSTITUTION VII-213

A. The school setting makes different roles available to different individuals depending upon the sub-group to which they belong VII-213

B. Individuals often affect the role expectations VII-213
C. Effects of various roles upon individual and group behavior VII-213
D. Interactions effect roles and role expectations . . . VII-214

VI. THE SCHOOL AS AN ORGANIZATIONAL SYSTEM VII-216

A. Structural organization possibilities VII-216
B. Organizational schemes as determined by decision-making frame-work VII-216
C. Organizations within the school VII-216

VII. THE COMMUNITY AND THE SCHOOL VII-217

A. Social forces which shape schools and their interactions VII-217
B. Impact of schools upon the community and the society they serve VII-218
C. Sub-groups in the community VII-218
D. Each school system reflects the community and institutions it serves VII-218

VIII. EDUCATION AND THEORY OF CULTURE VII-219

A. Relevance of the theory of culture VII-219
B. Theory of culture VII-219
C. Culture, education and anthropology VII-219

IX. CULTURAL PERSONALITY AND EDUCATION VII-219

A. Man as a product and producer of culture VII-219
B. Enculturation as a process of internalizing cultural patterns in the personality structure VII-219
C. The role of culture in personality formation VII-219
D. Theoretical problems in the study of the relationship between culture and personality VII-220
E. Relevance of culture-and-personality studies for education VII-220

X. EDUCATION IN MODERN AND PRIMITIVE SOCIETIES VII-220

A. Some universal characteristics of education VII-220
B. Contrasting nature of modern and primitive societies . VII-220
C. Constrasting modern and primitive education VII-220

XI. EDUCATION AND CULTURAL CHANGE VII-220

A. Cultural change and cultural lag VII-220
B. Education and cultural change VII-220

XII. EDUCATION AND CULTURAL DISCONTINUITY VII-220

A. Discontinuity, a consequence of long separation of the immature VII-221
B. Discontinuities in American culture VII-221
C. Education and culturally-induced discontinuities . . . VII-221
D. Basic questions concerning cultural discontinuities . VII-221

XIII. EDUCATION AND CULTURAL VALUES VII-221

A. Values as ideals which the culture considers worth striving for VII-221
B. Three issues for education VII-221
C. Results of ideal vs. emergent values VII-221
D. Results of traditional vs. emergent values VII-221
E. Results of dominant vs. minority values VII-221

XIV. TEACHER AND CURRICULUM IN CULTURAL PERSPECTIVE VII-221

A. Facts about American culture VII-221
B. Curricular problems VII-221
C. The teacher in contemporary culture VII-222

INTRODUCTION FOR

BEHAVIORAL SCIENCE STUDY FOCUSED UPON

SOCIAL-PHILOSOPHICAL FOUNDATIONS OF EDUCATION

The second experience in human learning occurs during the senior year, concurrent with internship, when students study the environmental systems which influence the growth of the human being and with which the educational process must concern itself. This experience has been planned under the assumption that a pupil lives in a series of environmental systems: (1) his own internal environment, (2) the environment by the family, (3) the environment created by the school, (4) the environment created by the community, and (5) the larger cultural environment consisting of elements and forces from the national and international areas. We believe that as we aid the prospective teacher to acquire more skill and perception in analyzing the positive and negative elements of these environments, the more sophisticated response he will be able to make in diagnosing and developing behavioral competencies of his pupils.

The basic concepts which will be considered in this phase of the program are drawn from sociology, anthropology, and philosphy, as well as from the student's earlier work in such areas as social science and humanities. No attempt will be made to treat any of the areas of disciplines systematically or exhaustively. We are here interested only in those concepts which have the most direct bearing upon the educational process. We will discuss these concepts by drawing upon the student's experience in the classroom and the community in which he is doing his intern teaching.

OVERALL OBJECTIVES

The overall objectives of the second phase of human learning are as follows:

1. To facilitate the transition of the prospective teacher from student to professional practitioner.
2. To provide experience in using such basic concepts as stratification, role, status, and prestige as tools of analysis for clearer understanding of classroom, faculty, institutional, and social situations.
3. To identify the multi-cultural forces that shape the community, school, and individuals in the school.
4. To recognize the limitations of the school as a single factor among the many which influence a pupil's development.
5. To recognize that the choice of things to teach involves a consideration of commonly held values in our society.
6. To compare the potential and actual contributions of non-school agencies to curricular experiences of youngsters.
7. To identify the many processes through which a culture transmits its heritage.

8. To differentiate among the various types of evidence used to support educational decisions and their implications for the teaching profession.
9. To examine various views concerning the relationship between power (legal, economic, political, etc.) and legitimate authority--especially as they are manifested in school and classroom organization, curriculum content, and methods and materials of instruction.
10. To identify the ethical responsibilities of the teacher.
11. To promote an understanding of the self-discipline necessary to successful teaching.
12. To compare the roles and contributions of the education associations, teacher's unions, and other types of professional organizations.
13. To analyze the criteria by which a profession and a professional can be identified.

CONTRIBUTIONS TO ANALYTIC SKILLS AND MODES OF INQUIRY OF THE TEACHER CANDIDATE

As indicated in the objectives listed above, we hope to help the student use the concepts of the behavioral and social sciences in analyzing the community, school, and the individuals in his classroom. An increased awareness, for example, of the multicultural forces at work in his community should make him better able to cope with the learning and behavioral problems in his classroom. This awareness can be attained by reading and discussion, but it can be increased by a careful analysis of the nature of the community in which he is doing his intern teaching. We hope to attain a judicious balance between the theoretical and practical approaches, and, by doing, to help establish in the student's mind an habitual way of looking at sociological and philosophical problems.

Since we will be working with small groups (10-15) of students we will have many opportunities to put the student "on the spot" concerning his value system, making him take a position and defend it by using the concepts we discuss in the course.

OVERVIEW OF THE CONTENT

The content of this portion of the human learning bloc is best indicated by the outlines which follow.

TIME REQUIRED

The program we propose will require one year to complete. The student will spend a portion of his time during Fall Term working with community services agencies and three hours a week in class during Winter and Spring Terms.

RATIONALE AND APPROACH

All too frequently in the past we have certified teachers who have had no opportunity to analyze a community, school, pupils, or themselves in a systematic way. We have generally failed to establish the close relationship which exists between the behavioral and social sciences, philosophy, and education, and we have treated the classroom as though it were isolated from the community.

We propose to give the students a series of experiences which will provide them with the concepts, analytic tools, and awareness of the problems in contemporary society which will enable them to analyze the community in which they are teaching.

During Fall Term of their Senior year the students will be required to spend a portion of their time working with community service agencies, the amount of time spent being determined by the number of cooperating agencies and the released time they are given by the schools in which they are teaching. There will be a weekly meeting, with the directors of the various community agencies being asked to discuss the nature of their programs, the type of problems they most frequently encounter, and, most significantly, how they can work with the teachers and school administrators in finding solutions to their common problems.

During Winter and Spring Terms the students will be participating in weekly discussions concerned with sociology, anthropology, and philosophy as they relate to educational problems and issues. The discussions will be based in part upon their Fall Term experiences.

What we hope to accomplish through this combination of practical experiences and consideration of theories has been stated in our overall objectives.

SUMMARY OF UNIQUE APPROACHES

1. Having the students work with community service agencies.
2. Adapting the presentation and discussion to specific problems in a specific community, i.e., starting with the student's immediate experience.
3. Using people in the local community (lawyers, social workers, school administrators, etc.) as discussion leaders and resource people.
4. Working with small groups of teacher candidates (intern teachers), thus giving each of them an opportunity to participate very actively in discussions which are designed to help them clarify their thinking concerning problems of both immediate and future concern.

ORGANIZATION

Our student population will consist of those students assigned to each of several intern teaching centers. We anticipate having groups of 10-15 interns in each of the centers.

No credit will be given for the work with community agencies. We feel that this activity should be regarded as part of the orientation for the new teacher.

Our classes will meet for three hours one night each week. Registration for the course will be handled at the same time as registration for the internship. A campus faculty member will be in charge of each of the groups of interns, but we see his role as that of organizer, observer, stimulator, coordinator, and colleague rather than as an authority figure. If we are to be successful in our first objective, that of aiding the teacher candidate in the transition from student to professional, we must create the kind of environment in our groups which will encourage him to be concerned with more significant things than whether he gets an "A" or a "B" in the course.

RESOURCES REQUIRED TO IMPLEMENT THE PROGRAM

1. Video tape machine and tapes.
2. 16mm. film projector
3. Commercially recorded tapes.
4. A library of selected books for each intern center, or, in lieu of this, funds for obtaining rights to reproduce portions of the books.
5. Honoraria for participants from the local communities.

CONTENT OUTLINE FOR A BEHAVIORAL SCIENCE STUDY FOCUSED UPON SOCIAL-PHILOSOPHICAL FOUNDATIONS OF EDUCATION

I. THE INDIVIDUAL AND THE SCHOOL

A. The individual and the purpose of education in a contemporary society: three views. (Kneller)

1. Education is that reorganization or reconstruction of experience which adds to the meaning of experience and adds to the person's power to control the cause of subsequent experience.
2. The primary purpose of the school is to foster rationality, a knowledge of things-in-themselves, and a humility in the face of real authority through a liberal, classical education.
3. The primary aim of education is to help the child attain completeness by bringing him into accord with unchanging truths.

B. The school and individual freedom.

1. The relationship between the authority of the teacher and the freedom of the student to learn. (Nash)
    a. Teacher--centered or student--centered classroom?
    b. The impact of varying approaches to discipline and evaluation on the learning and retention of pupils in school.
2. Equal education opportunities and the freedom to learn. (Vaizey)
    a. The effects of diagnostic testing and ability grouping on the likelihood of the individual realizing his potential. (Brookover)
    b. The effects of racial segregation on learning.
    c. The effects of some current attempts to desegregate schools on learning.
3. The authority of the peer group and the freedom to learn. (Nash)

II. AMERICAN SOCIETY AND ITS SCHOOLS

A. Contemporary society and the functions of education.

1. Preservation of heritage.
2. Research and the promotion of knowledge.
3. Service to the community at large.

B. Contemporary views on the nature of education authority. (Stanley)

1. Authority rests with the state as the authorized voice of society.
2. The educator's authority rests upon the consensus of opinion in the community in which he teaches.
3. The educator derives his authority from the fundamental moral and intellectual commitments of the culture.

a. Private morality.
b. Institutional morality.

4. Educational authority comes from the educator's professional expertise.

C. Church-state relationships and educational authority: the nature of the problem. (Culbertson)

1. The growth of non-public education.
2. The question of local, state, and national aid for parochial schools. (Katz)
3. The question of public control of parochial schools: e.g. in Utah, New York, Michigan.

D. The role of the federal government in education. (Nash)

1. School finance and the relationship of local, state, and federal governments. (NEA Research Bulletin)
2. School control and the relationship of local, state, and federal governments

E. The teacher in a bureaucratic society: the limits of educational authority.

1. Legal rights, responsibilities, and limitations.
2. Extra-legal rights, responsibilities, and limitations.

III. THE PROFESSIONAL IN A DEMOCRATIC SOCIETY

A. What sets of criteria underlie the various concepts of professionalism? (Blackington)

B. To what extent does education meet these criteria?

C. Teacher evaluation: who is responsible? (Fatter)

D. Strikes, sanctions, and teacher organizations: should professionals strike or withhold their services? (Seanlon)

E. Recent and contemporary legislation concerning education is Michigan.

IV. THE SOCIAL ASPECTS OF THE TEACHING-LEARNING ACTIVITY

A. Individual differences are multi-faceted and change with time. Examine the physical, emotional, social, and cognitive development and their inter-relationships.

1. Inherited traits have an affect upon the growth of the individual and are unique to the individual.
   a. Physical maturity has an affect upon social development.
   b. The biochemical structure of an individual has an affect upon ones ability to cope with frustrations.

2. Environment factors have an affect upon the growth of the individual and are unique to the individual.
    a. The influence of a non-verbal environment.
    b. The importance of environment deprivation.
    c. The effects of environmental over abundance.
    d. Lack of mothering and its effects upon socialization.

B. The self-concept is a social phenomenon.

1. Behavior appropriate to oneself.
2. Appropriateness of behavior defined by the internalization of the expectations of significant others. (Sullivan)
3. Self-conception of persons abilities as acquired in social interactions.
4. Persons learn what significant others expect them to learn. (Rosenthal)

C. Self-concept influences the individual's social development.

1. The aspiration levels of the individual limits his ultimate development.
2. The ability of an individual to adjust to rapidly changing occupational and economic forces.
3. Self-concept affects continued mental health.
4. The development of self-concept is a prerequisite to meaningful marriage and family life. (Erikson)
5. The self-concept affects the individual's social attitudes and values.
6. The school is an agency in determining the individual's self-concept.
    a. The impact of success and failure.
    b. The impact of significant others is greatest during the formative years, i.e., from teachers and parents.
    c. The effect of organizational procedures upon the individual self-concept, e.g., labeling practices (student numbers, grading,racial designation, reflections upon the family name, grouping the gifted and mentally retarded, tracking and ability grouping).
    d. The self-concept often affectsones relationship to the school environment, i.e., the drop-out, the conformist, and non-conformist.
7. Achievement and motivation as an outcome of self-concept. (McClellan)

D. The group serves as a learning experience for each individual by giving him feedback to his actions.

1. The group can stimulate or retard risk-taking behavior.
2. The group reactions serve as a measure of individual social effectiveness.
3. Actions in group help individual to gain insights into self (i.e., popularity vs. integrity).

E. The group's effects upon the individual.

1. Group dynamics, i.e., the formal structure of the group as related to individual performances, i.e., the organization of the group limits the roles available to an individual.

2. Interpersonal relations affect individual performance by providing feedback. Some possible roles are: aggressor, blocker, recognition seeker, self-confessor, playboy, dominator, help seeker, and special interest pleaser. Other roles are: the class clown, "one of the boys", the bully, the executive, the egotist, the flirt, the tyrant, the con-artist, the objector, the imitator, the doer, the summarizer.

F. Procedures for observing group behavior.

1. The structure of primary groups.
    a. Types of groups and their effectiveness.
        (1) Natural grouping which grows out of needs and talents of the individual members.
        (2) Formal groups which are designed and staffed to meet extrinsic need.
    b. Every group needs various membership roles filled. The role of the:
        (1) Imitator
        (2) Contributor
        (3) Information Seeker
        (4) Opinion Seeker
        (5) Information Giver
        (6) Opinion Giver
        (7) Elaborator
        (8) Coordinator
        (9) Orientor
        (10) Evaluative Critic
        (11) Energizer
        (12) Procedural Technician
        (13) Recorder
2. Group atmosphere effects individual social development.
    a. Cooperation vs. Competition: cooperative groups tend to reinforce behavior which enhances individual concerns.
    b. Inclusion vs. Exclusion: the inclusive group tends to attain goals for which the group was established while an exclusive group tends to maintain the continuance of the group.

G. Working with groups.

1. Sociogram as a means of identifying inter-relationships between individual group members.
2. Interaction analysis. (Ned Flanders)

3. Minority group members within the majority group. (Individual status, roles, and self-concept)
4. Ability to utilize competence contained within the group to attain collective achievement.
5. Individual contribution is effected by nature of group goals.
   a. Stated goals serve to unify individual efforts.
   b. Individual goals may dampen group efforts.
   c. Unstated goals generally fragment efforts.

H. The structural organization of the classroom.

1. Sociometric techniques applied to classroom organization.
2. The classroom as a formal and/or natural group.
3. The classroom as an institutional organization with legal, economic and political dimensions and with rituals, traditions, and roles.

V. THE SCHOOL AS A SOCIAL INSTITUTION.

A. The school setting makes different roles available to different individuals depending upon the sub-group to which they belong, i.e., teacher, student, custodian, etc.

1. Roles determine the rights and responsibilities of individual.
2. Role expectations establish individual behavior. It is possible to change the behavior pattern of the individual by changing role expectations or by changing the persons role.

B. Individuals often affect the role expectations.

1. Individuals may accept or reject roles or any part thereof. In order to perform well it is necessary to accept all aspects of the role (rights, responsibilities, and role expectations).
2. Role acceptance and rejection as a result of self-image.
3. Each individual fills many roles:
   a. Compatible roles: some roles are completely independent of each other and an individual may fill either or both without affecting his performance in either.
   b. Complimentary roles: some roles are mutually supportive--an individual fills both roles and his performance in each is improved because of the other role.
   c. Conflicting roles: some roles conflict, i.e., if an individual fills both roles he must violate one in order to serve the other.

C. Effects of various roles upon individual and group behavior.

1. The Teacher is expected to serve many conflicting roles, i.e., the school teacher stereotype, civil servant, substitute parent, professional educator, advisor, exemplar of proper conduct, etc., generally operate as: 1) turbulant, imaginative, intellectual and free acting, and 2, self-controlling or self-disciplining, or 3) fearful, vacillating and uncertain.

2. The administrator is expected to serve many roles, e.g., executive, a businessman, a public relations man, disciplinarian, philosopher.
3. A parent's relationship to the school is tenuous and undefined; usually it is a result of what the school and individual parent decide relative to each situation. A parent may be an advisor or a meddler; a sponsor or an aid; ultimate decider or uninformed; expeditor or retardant.
4. The fringe roles filled by local residents, shopkeepers, police, etc., may assist or hamper the school.
5. The students are expected to be submissive and respectful to all other roles, but generally operate as: 1) conformers, 2) opposers, 3) waivers, or 4) strivers.

D. Interactions effect roles and role expectations.

1. Interaction can be analyzed by using group dynamics, sociometrics, and interaction analysis techniques.
2. Types of interaction are based on role expectations one group places upon another; the expectations may be compatible, complementary, or conflicting.
    a. Administrator interactions with school board:
        (1) School boards expectations of administrator depend on motives of individual board members. In general motives may be:
            (a) Civic
            (b) Special interest
            (c) Political or economic advancement
        (2) Administrators expectations of the school board depend on how the individual administrator views the board.
            (a) Responsible civic minded citizens concerned with improving education.
            (b) Uninformed laymen who have decision making authority necessary for administrators.
            (c) Group of individuals demanding too much time and effort because view administrator as their servant.
            (d) Non-representative pressures.
    b. Administrators interactions with parents:
        (1) Parents expectations of administration:
            (a) Many parents approach administrators with the fear and hostility they associated with the role during their own school career.
            (b) Many parents view the administrator as their employee.
            (c) Recently administrators have come to be regarded as competetent executives, equal to successful businessmen in some communities.
        (2) Administrators expectations of parents:
            (a) Support school policy when dealing with their child.
            (b) Sponsor activities.
            (c) Support, but don't interfer with, school policy.
    c. Administrators interactions with teachers.

- (1) Teachers expectations of administrators are influenced by orientation to teaching. Can view administrator as:
  - (a) Boss who directs actions and controls future.
  - (b) Leader who serves as a provider of idealogical, professional, and material resources necessary for education.
- (2) Administrators expectations of teachers.
  - (a) Expediters of board's wishes who assist the administration in carrying out the wishes of the board and the parents.
  - (b) Professional educators, who know how to use their time and talents to the best of the school's and students

d. Administrators' interactions with students.
- (1) Administrators' expectations of students.
  - (a) Conform to school policy and roles and expect penality for violation of such policy.
  - (b) Be invlolved to some extent in formation of policy.
- (2) Students' expectations of administrator.
  - (a) Fair in administration of praise, rewards, and punishments.
  - (b) Create opportunity for student participation in school policy.
  - (c) Determine major policies.
  - (d) Correct unfair actions of teachers, counselors, and other students.
  - (e) Establish and maintain special and traditional activities and interests.

e. interactions with parents:
- (1) Parents' expectations of teachers: often expectations are influenced by past experiences with school.
  - (a) Maintain or enhance discipline techniques of home.
  - (b) Teach basic skills.
  - (c) Be responsible for well being of student.
- (2) Teachers' expectations of parents:
  - (a) Support classroom policy and activities.
  - (b) Interest in school and school activities of their child.

f. Teachers' interactions with teachers.
- (1) Teachers' expectations of teachers
  - (a) Often interaction among teachers is competitive.
  - (b) Competition between academic and non-academic teachers.
  - (c) Stand united when challenged by students.
  - (d) Primarily operate in role characterized by dominance and submission, subordinate in classroom, subordinate to administrators.
  - (e) Rarely have enough peer contact to develop mutual respect.
  - (f) Not interfere with another teacher's classroom.
  - (g) Maintain unified front.
  - (h) Cooperation to achieve common goals.
  - (i) Help develop professional code.

g. Teachers' interactions with students.

- (1) Teachers' expectations of students.
  - (a) Subordinate to school and classroom policy and rules.
  - (b) Cheerful cooperation.
  - (c) Carry out assignments and learn designated material.
- (2) Students' expectations of teachers vary depending upon previous experiences with teachers and authority figures.
  - (a) Generally students expect teachers to be fair and informed.
  - (b) Some students expect rigid discipline and harsh punishment.

h. Students interact with students.
- (1) peer group loyality.
- (2) Involvement in social activities.
- (3) Acceptance by peers.

VI. THE SCHOOL AS AN ORGANIZATIONAL SYSTEM.

A. Structural organization possibilities.

B. Organizational schemes as determined by decision-making framework.

1. Democratic organization uses broad decision making base, requires complex internal communication systems, implementing agents usually involved in making decisions.
2. Bureaucratic system utilizes selected groups to make decisions, needs direct communication with other groups as well as implementing agency which does not share in decision making process.
3. Autocratic organization depends on small group or one man to make all decisions; direct communication to implementing agency necessary.

C. Organizations within the school.

1. Age-grades historically are relatively new.
   - a. 8-4 plan.
   - b. Evolution of junior and senior high schools in response to problems of the 8-4 plan.
   - c. The establishment of junior colleges.
   - d. Problems with age-grades is that mental age is so distributed that first-grade teachers can expect their students to have mental ages from four to eight years. Achievement is similarly distributed.
   - e. Non-graded plans, e.g., children to proceed at their own level and rates of speed.
2. Sex as a basis for school organization has almost disappeared but sex differentiation has not.
   - a. Some effects of sex differentiation:
     - (1) Boys out number girls 2-1 in academic failures.
     - (2) Proportionately fewer qualified women than men enter college.
     - (3) Parents and teachers pressure boys for achievement.

      - (4) Parents and teachers have higher expectations for boys.
    - b. Methods of equalizing educational opportunities for boys and girls.
      - (1) Admit boys to school at a later age.
      - (2) Make school more attractive to boys by using, e.g., space heroes in readers, in place of Dick and Jane.
      - (3) Use of more men in elementary schools to give boys models for imitation.
  - 3. Race as a basis for school organization: segregation.
    - a. 1954 Supreme Court decision.
    - b. Desegration in Northern and Southern schools.
    - c. Negro teachers and administrators in the transition from segregated to desegregated schools.
    - d. Less qualified Negro staff in some cases.
    - e. Negro educators may lose opportunities to teach or serve in leadership roels.
  - 4. Place or residence as a basis for school organization: de facto segregation.
    - a. Definition: a result of residential segregation.
    - b. Counterproposal to de facto segregation.
      - (1) Rezoning existing attendance areas.
      - (2) Locate new schools in areas so as to promote desegregation.
      - (3) Bussing.
      - (4) Programs for the culturally handicapped.
  - 5. Scholastic ability: Bettleheim, "segregation: new style."
    - a. Special classes.
    - b. Grouping by ability. Grouping by ability on the basis of standardized tests tends to segregate not alone on the basis of scholastic ability but on racial, ethnic, and socio-economic lines.
    - c. Lack of evidence that ability grouping produces improved achievement.
  - 6. The effects of size and complexity on school organization.
    - a. Tendecy to consolidate local schools and school districts.
    - b. Effects of consolidation:
      - (a) Greater adequacy and efficiency of education services.
      - (b) Wider ranges of facilities.
      - (c) The instructional program can be more integrated with administrative and supervisory services and special services such as audio-visual aids and counseling.
      - (d) Teaching staff with more varied backgrounds of education and experience.
      - (e) Economically more feasible.
    - c. Division of functions in larger school districts.
    - d. Division of authority in larger school districts.

VII. THE COMMUNITY AND THE SCHOOL.

A. Social forces which shape schools and their interactions.

1. The school as a political institution reflects the political milieu of the community.
2. Individual citizens influence the school.
3. The school is affected by informal and social pressures.
4. Legal controls which affect the school from within the community and from outside the community.

B. Impact of schools upon the community and the society they serve.

1. Social attitudes, values, and behavior are influenced by school experiences. Sometimes the results are desirable, sometimes not, sometimes planned, sometimes not.
    a. The development of positive social values in the school setting.
    b. The development of negative social values in the school setting.
2. The school as a means for social mobility or stratification.
    a. The school experiences have an impact upon job opportunity and subsequent income.
        (1) The schools impact upon individual and group aspirations
        (2) The schools as a vocational training institution.
        (3) The curriculum.
        (4) Guidance.
    b. The school has the responsibility to develop individual and group competence for coping with society.
3. The social roles of the school.
    a. The school as an institution which passes on and maintains social values vs. the school as an agent of change.
    b. The school and moral and spiritual values.
4. The school as a separate sub-culture, i.e., isolated from the mainstream.

C. Sub-groups in the community.

1. Students in the community--the community has an establised set of expectations for students.
    a. Some expectations arise out of legitimate and formal concerns, while others are questionable and often informal.
    b. Expectations for the sub-group often conflict with other expectations for the sub-group of individual members.
    c. The student as a sub-member of society vs. the student as a young member of society.
2. The teacher in the community.
    a. The teacher as a professional.
    b. The teacher as a civil servant.
    c. The teacher as a substitute mother.
    d. The teacher as a member of the community, a "citizen."

D. Each school system reflects the community and institutions it serves.

1. Examine the structure of the school and community by use of

case studies based on reading and field experience.
  a. The suburban school community.
  b. The urban school community.
  c. The rural school community.
2. Examine the effects of larger institutions upon the school and the community.
  a. Mass media.
  b. State and federal organizations: State Board of Education and the Department of Health, Education and Welfare.
  c. AFT-NEA.
  d. Corporations and the business concerns.
  e. International events as related to national and local security.

VIII. EDUCATION AND THEORY OF CULTURE.

A. Relevance of the theory of culture. (Paulsen and Kneller)

B. Theory of culture.

1. The meaning of culture. (Kluckhohn)
2. Participation in culture. (Linton)
3. Culture, Society and the Individual. (Linton)
4. Culture and human nature. (Montagu)

C. Culture, education and anthropology. (Knller)

IX. CULTURE, PERSONALITY AND EDCATION.

A. Man as a product and producer of culture.

1. Cultural factors in human intellectual, emotional, and biological attributes.
2. Functions of existing cultural patterns.
  a. Ready solutions to problems faced by individuals.
  b. Freeing individuals for more creative purposes.
  c. Creating outlets for individual's energies and interests.

B. Enculturation as a process of internalizing cultural patterns in the personality structure.

1. The role of language in enculturation.
2. The relation of enculturation to schooling and education. (Herskovits)
3. The distinction between enculturation and socialization. (Mead)

C. The role of culture in personality formation. (Linton)

1. Child-rearing practices and national characteristics. (Mead)
2. Divergent images of the child in films produced by different nations. (Wolfenstein)
3. Life cycle and the progression from childhood into adulthood. (Angotee)

        a. The pressures on children to be adult. (Kimball)
        b. Barriers to adulthood. (Kimball)

D. Theoretical problems in the study of the relationship between culture and personality.

E. Relevance of culture-and-personality studies for education.

X. EDUCATION IN MODERN AND PRIMITIVE SOCIETIES.

A. Some universal characteristics of education.

B. Contrasting nature of modern and primitive societies.

1. In homogeneity of cultures.
2. In nature of kinship and family structures.
3. In world view.
4. In orientation toward change.

C. Contrasting modern and primitive education.

1. The degree to which children share in the basic economic life of the community.
2. The separation of children from parents in the educational systems.
3. Showing in context vs. hearing out of context.
4. The amount of information to be passed on.
5. The length of time the teacher is committed to a given child.
6. The degree of institutionalization.

XI. EDUCATION AND CULTURAL CHANGE.

A. Cultural change and cultural lag.

1. Some examples of cultural change.
    a. A sheidkdom in Arabia. (film)
    b. Plantation workers in Mississippi. (film)
2. Some examples of cultural lag.
    a. Celibacy in the Catholic Church. (film)
    b. Delinquency and the emerging youth culture. (film)
3. Some theories about cultural change. (Mead and Spindler)

B. Education and cultural change. (Kneller)

1. Educational progressivism
2. Educational conservatism
3. Reconstructionism.

XII. EDUCATION AND CULTURAL DISCONTINUITY.

A. Discontinuity, a consequence of long separation of the immature personality from the adult world in industrial societies.

B. Discontinuities in American culture.

C. Education and culturally-induced discontinuities.

1. Views of educational conservatives.
2. Views of educational progressives.
3. Views of some anthropologists.

D. Basic questions concerning cultural discontinuities.

1. How much discontinuity that is inevitable for anyone who grows up in industiral society.
2. How much of this discontinuity that can be alleviated.
3. How this discontinuity affects school studies and methods of instruction.

XIII. EDUCATION AND CULTURAL VALUES.

A. Values as ideals which the culture considers worth striving for.

B. Three issues for education. (Kneller)

1. Ideal vs. manifest cultural values.
2. Traditional vs. emergent values.
3. Dominant vs. minority values.

C. Results of ideal vs. manifest values.

1. Conflicts in the society.
2. Conflicts in educational policy.

D. Results of traditional vs. emergent values.

1. Conflicts in the society.
2. Conflicts in educational policy.

E. Results of dominant vs. minority values.

1. Political and social conflicts.
2. Educational conflicts.

XIV. TEACHER AND CURRICULUM IN CULTURAL PERSPECTIVE.

A. Facts about American culture.

1. Swiftly changing culture.
2. Increasing complexity of our culture.
3. The pressure to incorporate "outsiders" to the dominant middle class culture.

B. Curricular problems.

1. What curriculum will prepare young people to live in a world of continuous change?
2. How to teach the increasingly specialized knowledge of today's world and yet maintain cultural continuity and heritage.
3. How to educate the "culturally disadvantaged" and others who are outsiders.
4. "Solutions" suggested by the progressives and conservatives in educational circles.

C. The teacher in contemporary culture.

   1. What is the standing of the teacher in this culture? What should it be?
   2. What authority does this culture allow the teacher to exercise over his pupils?
   3. What solutions are available?

```
*OBJECTIVES     THE STUDENT CAN LIST FIVE KINDS OF CONTRIBUTIONS CULTURAL 01467 15
                ANTHROPOLOGY MAY MAKE TO EDUCATION.                       01467 16
*PREREQUISITE NONE.                                                       01467 17
*EXPERIENCE     READ:  [CULTURAL ANTHROPOLOGY AND EDUCATION,[ BY F. ROBERT01467 11
                PAULSEN,  DISCUSS: HOW THE CONCEPT OF CULTURE CONTRIBUTES 01467 12
                TO THE UNDERSTANDING OF HUMAN BEHAVIOR AND TO THE NATURE  01467 13
                OF HUMAN NATURE.                                          01467 14
*SETTING        INDEPENDENT  COLLEGE                                      01467 10
*MATERIALS      ABOVE LISTED ARTICLE IS REPRINTED IN J. H. CHILCOTT AND   01467  5
                OTHERS ≥EDS+, READINGS IN SOCIO-CULTURAL FOUNDATIONS OF   01467
                EDUCATION, PP, 12-19.  WADSWORTH, 1968.                   01467
*LEVEL          ALL GRADES                                                01467  8
*GENERAL        ALL CANDIDATES                                            01467  7
*HOURS          1/2                                                       01467  6
*EVALUATION     CAN DESCRIBE THE GENERAL AIMS OF CULTURAL ANTHROPOLOGY AND01467 18
                HOW THIS DISCIPLINE PROVIDES CONCEPTS AND KNOWLEDGE       01467 19
                IMPORTANT FOR THE EDUCATION OF A TEACHER.                 01467 20
*FILE           ANTHROPOLOGY  CULTURE                                     01467  9
```

```
*OBJECTIVES     THE STUDENT CAN ≥1+ PROVIDE ILLUSTRATIONS ON HOW CULTURE  01468 17
                [CHANNELS BIOLOGICAL PROCESSES[, INFLUENCES THE EXPRESSION01468 18
                OF EMOTIONS, AND AFFECT HUMAN RATIONALITY, ≥2+ DISCUSS HOW01468 19
                MAN IS BOTH A CREATOR AND AS WELL AS A CARRIER OF HIS     01468 20
                CULTURE,                                                  01468 21
*PREREQUISITE THE CONCEPT OF CULTURE+ ANTHROPOLOGICAL CONCERNS WITH THE 01468 22
                QUESTION OF THE NATURE OF HUMAN NATURE.                   01468 23
*EXPERIENCE     READ:  [QUEER CUSTOMS[ BY CLYDE KLUCKHOHN,  DISCUSS:  AT  01468 11
                LEAST FIVE SIGNIFICANT WAYS IN WHICH DIFFERENT CULTURES   01468 12
                [SOLVE[ SOME COMMON HUMAN PROBLEMS IN DIVERGENT WAYS+ WHY 01468 13
                CULTURE IS A PRECIPITATE OF HISTORY+ WHY CULTURE IS LIKE A01468 14
                MAP+ HOW MODERN MEN ARE CREATORS AS WELL AS CARRIERS OF   01468 15
                CULTURE,                                                  01468 16
*SETTING        INDEPENDENT  COLLEGE                                      01468 10
*MATERIALS      ARTICLE:  [QUEER CUSTOMS[ BY CLYDE KLUCKHOHN IN HIS MIRROR01468  5
                FOR MAN, ≥MCGRAW-HILL, 1949, PP. 17-37+.  REPRINTED IN    01468
                J. H. CHILCOTT, ET AL,  READINGS IN THE SOCIO-CULTURAL    01468
                FOUNDATIONS OF EDUCATION ≥WADSWORTH, 1968+ PP. 29-39.     01468
*LEVEL          ALL GRADES                                                01468  8
*GENERAL        ALL CANDIDATES                                            01468  7
*HOURS          1/2                                                       01468  6
*EVALUATION     CAN LIST SOME OF THE WAYS IN WHICH DIFFERENT CULTURES     01468 24
                SOLVE SOME COMMON HUMAN PROBLEMS OF EXISTENCE.            01468 25
*FILE           CULTURE  CULTURE  HUMAN NATURE                            01468  9
```

```
*OBJECTIVES     THE STUDENT CAN DISTINGUISH BETWEEN CULTURAL UNIVERSALS,  01469 19
                SPECIALTIES, AND ALTERNATIVES.                            01469 20
*PREREQUISITE THE CONCEPT OF CULTURE AS USED BY ANTHROPOLOGISTS.        01469 21
*EXPERIENCE     READ:  [PARTICIPATION IN CULTURE[ BY RALPH LINTON.        01469 11
                DISCUSS:  HOW INDIVIDUALS IN A SOCIETY PARTICIPATE        01469 12
                DIFFERENTIALLY IN THEIR CULTURE+ HOW CONCEPTS OF          01469 13
                [UNIVERSALS,[ [SPECIALTIES,[ AND [ALTERNATIVES[ WERE      01469 14
                DEVISED TO INDICATE THIS VARYING DEGREES OF CULTURAL      01469 15
                PARTICIPATION+ AND WHAT THIS [INCOMPLETE PARTICIPATION OF 01469 16
                ALL INDIVIDUALS IN THE CULTURE OF THEIR SOCIETIES[ MEANS  01469 17
                FOR THE PROBLEM OF SOCIAL INTEGRATION.                    01469 18
*SETTING        INDEPENDENT  COLLEGE                                      01469 10
*MATERIALS      ARTICLE:  [PARTICIPATION IN CULTURE,[ BY RALPH LINTON IN  01469  5
                HIS THE STUDY OF MAN, PP. 271-87.  APPLETON-CENTURY, 1936.01469
                CHILCOTT ≥1968 : 74+                                      01469
*LEVEL          ALL GRADES                                                01469  8
*GENERAL        ALL CANDIDATES                                            01469  7
*HOURS          1/2                                                       01469  6
*EVALUATION     THE STUDENT CAN IDENTIFY EXAMPLES OF UNIVERSALS,          01469 22
                SPECIALITIES AND ALTERNATIVES IN OUR CULTURE+ HE CAN LIST 01469 23
                THE REASONS WHY LACK OF CONSISTENCY AND INTEGRATION       01469 24
```

```
               RESULTS FROM THE PRESENCE OF [ALTERNATIVES[ AND           01469 25
               [SPECIALTIES.[                                            01469 26
*FILE          CULTURE  UNIVERSALS  ALTERNATIVES                         01469  9
```

```
*OBJECTIVES    THE STUDENT CAN DISTINGUISH BETWEEN THESE TECHNICAL TERMS 01470 16
               ≥CULTURE, SOCIETY AND INDIVIDUAL+ AND INDICATE HOW EACH   01470 17
               RELATES TO THE OTHER.                                     01470 18
*PREREQUISITE  DESCRIBE THE CONCEPT OF CULTURE.                          01470 19
*EXPERIENCE    READ:  [SOCIETY, CULTURE, AND THE INDIVIDUAL[ BY RALPH    01470 11
               LINTON.  DISCUSS:  HOW THE CONCEPTS OF [SOCIETY,[         01470 12
               [INDIVIDUAL[, AND [CULTURE[ ARE DISTINGUISHED FROM EACH   01470 13
               OTHER↓ HOW EACH OF THEM PROVIDES CERTAIN FRAMEWORK FOR    01470 14
               MAKING GENERALIZATIONS ABOUT HUMAN BEHAVIOR.              01470 15
*SETTING       INDEPENDENT  COLLEGE                                      01470 10
*MATERIALS     ARTICLE LISTED IS FROM RALPH LINTON, THE TREE OF CULTURE. 01470  5
               PP. 29-40,  ≥KNOPF, 1955+                                 01470
*LEVEL         ALL GRADES                                                01470  8
*GENERAL       ALL CANDIDATES                                            01470  7
*HOURS         1/2                                                       01470  6
*EVALUATION    CAN LIST THE SPECIFIC TYPES OF BEHAVIORAL DATA THAT WOULD 01470 20
               BE MOST RELEVANT FOR EACH OF THE FOLLOWING ANALYTICAL     01470 21
               DISTINCTIONS:  SOCIETY, CULTURE, INDIVIDUAL.              01470 22
*FILE          CULTURE  SOCIETY  INDIVIDUAL                              01470  9
```

```
*OBJECTIVES    THE STUDENT CAN IDENTIFY AT LEAST THREE OF THE FACTORS    01471 17
               THAT RELATE CULTURE TO PERSONALITY STRUCTURES.  HE CAN    01471 18
               ALSO DEFINE WHAT IS MEANT BY [ENCULTURATION.[             01471 19
*PREREQUISITE  THE CONCEPT OF CULTURE↓ THE RELATIONS AMONG SOCIETY,      01471 20
               INDIVIDUAL, AND CULTURE.                                  01471 21
*EXPERIENCE    READ:  [MAN, CULTURE, PERSONALITY[ BY GEORGE F. KNELLER.  01471 11
               DISCUSS:  HOW THE TEACHER PLAYS AN [ENCULTURATIVE[ ROLE   01471 12
               VIS-A-VIS HIS PUPILS, HOW THE FORMATION OF PERSONALITY IS 01471 13
               INFLUENCED BY SUCH ENCULTURATION PROCESSES, AND YET WHY   01471 14
               NO UNIFIED CONCEPTION HAS EMERGED WITHIN THE [CULTURE AND 01471 15
               PERSONALITY[ SCHOOL OF ANTHROPOLOGY.                      01471 16
*SETTING       INDEPENDENT  COLLEGE                                      01471 10
*MATERIALS     TEXT:  [MAN, CULTURE, PERSONALITY,[ BY GEORGE F. KNELLER, 01471  5
               FROM HIS EDUCATIONAL ANTHROPOLOGY, PP. 42-66.             01471
               WILEY + SONS, 1965.                                       01471
*LEVEL         ALL GRADES                                                01471  8
*GENERAL       ALL CANDIDATES                                            01471  7
*HOURS         1/2                                                       01471  6
*EVALUATION    LIST THREE TRADITIONAL APPROACHES TO THE STUDY OF         01471 22
               CULTURE-AND-PERSONALITY↓ LIST THE CRICITICISMS MADE       01471 23
               WITH RESPECT TO EACH OF THESE APPROACHES↓ LIST TWO NEWER  01471 24
               APPROACHES TO THE SAME STUDY.                             01471 25
*FILE          CULTURE  ENCULTURATION  CULTURE                           01471  9
```

```
*OBJECTIVES    THE STUDENT CAN DISCOVER FOR HIMSELF THE SIMILARITIES     01472 15
               AND DIFFERENCES ≥IF ANY+ IN CULTURAL ORIENTATION BETWEEN  01472 16
               HIM AND THESE WELFARE CLIENTS.                            01472 17
*PREREQUISITE  THE CONCEPT OF CULTURE↓ THE RELATIONS AMONG SOCIETY,      01472 18
               CULTURE, AND THE INDIVIDUAL.                              01472 19
*EXPERIENCE    VISIT:  THE WELFARE OFFICE AND OBSERVE THE BEHAVIOR OF THE01472 11
               VARIOUS CLIENT≤S THAT COME TO THE OFFICE.  INTERVIEW A    01472 12
               SOCIAL WORKER FOR DETAILS ON INFORMATION ABOUT CULTURAL   01472 13
               DIFFERENCES HE HAS OBSERVED IN HIS WORK.                  01472 14
*SETTING       LARGE GROUP  COMMUNITY                                    01472 10
*MATERIALS     NONE                                                      01472  5
*LEVEL         ALL GRADES                                                01472  8
*GENERAL       ALL CANDIDATES                                            01472  7
*HOURS         BLANK                                                     01472  6
*EVALUATION    CAN RECITE FROM HIS OBSERVATIONS AND INTERVIEWS AT THE    01472 20
               WELFARE OFFICE WHETHER OR NOT THESE WELFARE CLIENTS BELONG01472 21
               TO ANOTHER CULTURE ≥CULTURE OF POVERTY+.                  01472 22
*FILE          CULTURE  CUSTOMS  WELFARE WORK                            01472  9
```

```
*OBJECTIVES     THE STUDENT REVIEWS THE MATERIALS RELATED TO THEORIES OF     01473 17
                CULTURE,                                                     01473 18
*PREREQUISITE DESCRIBE THE CONCEPT OF CULTURE.                               01473 19
*EXPERIENCE     READ:  [ANTHROPOLOGY, CULTURE, EDUCATION,[ BY GEORGE F.      01473 11
                KNELLER,  DISCUSS:  HOW ANTHROPOLOGICAL KNOWLEDGE ABOUT      01473 12
                CULTURE MAY HELP STUDENT CLARIFY HIS THINKING ABOUT THE      01473 13

                ROLE OF EDUCATION IN SOCIETY+ HOW ANTHROPOLOGISTS VIEW       01473 14
                EDUCATION AS BELONGING [TO THE GENERAL PROCESS KNOWN         01473 15
                AS ENCULTURATION.[                                           01473 16
*SETTING        INDEPENDENT  COLLEGE                                         01473 10
*MATERIALS      ABOVE LISTED ARTICLE.  IT APPEARS IN KNELLER$S EDUCATIONAL01473  5
                ANTHROPOLOGY, PP. 1-16.  WILEY, 1965.                        01473
*LEVEL          ALL GRADES                                                   01473  8
*GENERAL        ALL CANDIDATES                                               01473  7
*HOURS          3/4                                                          01473  6
*EVALUATION     DESCRIBE THREE POSSIBLE WAYS IN WHICH ANTHROPOLOGICAL        01473 20
                STUDIES MAY AID THE TEACHER IN HIS PROFESSIONAL WORK.        01473 21
*FILE           CULTURE  CULTURE  EDUCATION                                  01473  9
```

```
*OBJECTIVES     TO DRAMATIZE FOR THE STUDENT THE ROLE OF LANGUAGE IN         01474 17
                STRUCTURING LANGUAGE AND IN THE ENCULTURATION OF             01474 18
                CHILDREN.                                                    01474 19
*PREREQUISITE CAN DESCRIBE THE CONCEPTS OF ENCULTURATION, PERSONALITY,       01474 20
                AND CULTURE.                                                 01474 21
*EXPERIENCE     LISTEN TO RECORDED TAPE:  [A WORD IN YOUR EAR,[ PART OF      01474 11
                WAYS OF MANKIND SERIES.  DISCUSS:  THE PURPOSE OF THE        01474 12
                LESSON, HOW LANGUAGE REFLECTS CULTURE, HOW CULTURE IS        01474 13
                REFLECTED IN LANGUAGE, AND HOW LANGUAGE IS USED AS A         01474 14
                TOOL IN ENCULTURATION.  ≥USE ONLY SELECTED PARTS OF THIS     01474 15
                TAPE RECORDING+                                              01474 16
*SETTING        LARGE GROUP  COLLEGE                                         01474 10
*MATERIALS      RECORDED TAPE IN THE SERIES [WAYS OF MANKIND[:  [WORD IN     01474  5
                YOUR EAR.[' 25 MIN.                                          01474
*LEVEL          ALL GRADES                                                   01474  8
*GENERAL        ALL CANDIDATES                                               01474  7
*HOURS          1/2                                                          01474  6
*EVALUATION     CAN DESCRIBE SEVERAL EXAMPLES OF CULTURE TRAITS WHICH        01474 22
                ARE REFLECTED IN LANGUAGE.                                   01474 23
*FILE           CULTURE  CULTURE  ENCULTURATION                              01474  9
```

```
*OBJECTIVES     THE STUDENT CAN RELATE THE PROCESS OF ENCULTURATION TO       01475 15
                THE PROCESS OF EDUCATION AND SCHOOLING, AS AT LEAST ONE      01475 16
                ANTHROPOLOGIST VIEWS IT.                                     01475 17
*PREREQUISITE PREVIOUS MODULE:  1474.                                        01475 18
*EXPERIENCE     READ:  [EDUCATION AND THE SANCTIONS OF CUSTOM[ BY            01475 11
                MELVILLE J. HERSKOVITS.  DISCUSS:  HOW HERSKOVITS DEFINES 01475 12
                THE RELATIONS BETWEEN CONCEPTS OF EDUCATION, SCHOOLING,      01475 13
                AND ENCULTURATION.                                           01475 14
*SETTING        INDEPENDENT  COLLEGE                                         01475 10
*MATERIALS      ARTICLE AS REPRINTED IN CHILCOTT, J. H. AND OTHERS ≥EDS.+ 01475  5
                READINGS IN THE SOCIO-CULTURAL FOUNDATIONS OF EDUCATION,     01475
                PP. 98-102.  WADSWORTH, 1968.                                01475
*LEVEL          ALL GRADES                                                   01475  8
*GENERAL        ALL CANDIDATES                                               01475  7
*HOURS          1/2                                                          01475  6
*EVALUATION     CAN ILLUSTRATE THE DIFFERENCES BETWEEN [EDUCATION,[          01475 19
                [SCHOOLING,[ AND [ENCULTURATION[ BY REFERRING TO DATA        01475 20
                FROM PRIMITIVE SOCIETIES.                                    01475 21
*FILE           CULTURE  CUSTOM  SCHOOLING                                   01475  9
```

```
*OBJECTIVES     TO CONTRAST TWO TECHNICAL TERMS, ENCULTURATION AND           01476 15
                SOCIALIZATION.                                               01476 16
*PREREQUISITE PREVIOUS MODULE:  1475.                                        01476 17
*EXPERIENCE     READ:  [SOCIALIZATION AND ENCULTURATION[ BY MARGARET MEAD.01476 11
```

```
                DISCUSS:  HOW MARGARET MEAD ATTEMPTS TO DISTINGUISH          01476 12
                BETWEEN THE TECHNICAL TERMS, SOCIALIZATION AND      -        01476 13
                ENCULTURATION, AND WHY SUCH A DISTINCTION IS NECESSARY.      01476 14
*SETTING        INDEPENDENT  COLLEGE                                         01476 10
*MATERIALS      CITED ARTICLE:  APPEARS IN CURRENT ANTHROPOLOGY IV, NO. 2    01476  5
                ≥APRIL 1963+ PP. 184-188.  ALSO REPRINTED IN CHILCOTT        01476
                ET AL.                                                       01476
*LEVEL          ALL GRADES                                                   01476  8
*GENERAL        ALL CANDIDATES                                               01476  7
*HOURS          1/2                                                          01476  6
*EVALUATION     EXAMINE, IN THE LIGHT OF MEAD≤S DISTINCTIONS, A CURRENT      01476 18
                ARTICLE ON SOCIALIZATION AND INDICATE WHY HER DISTINCTION    01476 19
                ADDS CLARITY TO AN OTHERWISE CONFUSING PROBLEM.              01476 20
*FILE           CULTURE  SOCIALIZATION  CULTURE                              01476  9
```

```
*OBJECTIVES     THE STUDENT CAN LIST TWO TYPES OF INFLUENCE A CULTURE        01477 18
                EXERTS ON THE YOUNG DEVELOPING PERSONALITY.  HE ALSO CAN     01477 19
                IDENTIFY THE INFLUENCE OF CULTURE AS THE PERSONALITY         01477 20
                MATURES AND AGES.                                            01477 21
*PREREQUISITE   THE CONCEPTS OF ENCULTURATION AND SOCIALIZATION.             01477 22
*EXPERIENCE     READ:  [THE ROLE OF CULTURE IN PERSONALITY FORMATION[ BY     01477 11
                RALPH LINTON.  ≥ILLUSTRATES THE KNELLER≤S MODAL OR BASIC     01477 12
                PERSONALITY STRUCTURE+  STATES PERSONALITIES.  DISCUSS:      01477 13
                THE DISTINCTION BETWEEN BASIC PERSONALITY TYPE AND STATUS    01477 14
                PERSONALITY WHICH LINTON DISTINGUISHED+ HOW THESE CONCEPTS   01477 15
                MIGHT BE EXAMINED FOR PURPOSES OF CURRICULUM DESIGN IN       01477 16
                EDUCATIONAL CIRCLES.                                         01477 17
*SETTING        INDEPENDENT  COLLEGE                                         01477 10
*MATERIALS      ARTICLE:  [THE ROLE OF CULTURE IN PERSONALITY FORMATION,[    01477  5
                BY RALPH LINTON IN HIS THE CULTURAL BACKGROUND OF            01477
                PERSONALITY, PP. 125-53.  APPLETON-CENTURY, 1945.            01477
*LEVEL          ALL GRADES                                                   01477  8
*GENERAL        ALL CANDIDATES                                               01477  7
*HOURS          1/2                                                          01477  6
*EVALUATION     THE STUDENT CAN ILLUSTRATE, FROM EXAMPLES TAKEN IN HIS       01477 23
                CULTURE, THE CONCEPTS OF BASIC PERSONALITY TYPE AND          01477 24
                STATUS PERSONALITIES.                                        01477 25
*FILE           CULTURE  CULTURE  SOCIALIZATION                              01477  9
```

```
*OBJECTIVES     THE STUDENT CAN OBSERVE BY FILM SOME OF VISUAL AND           01478 19
                AND NONVERBAL LEARNING THAT A CHILD EXPERIENCES IN           01478 20
                DIFFERENT CULTURES.                                          01478 21
*PREREQUISITE   THE CONCEPTS OF BASIC PERSONALITY STRUCTURE, MODAL           01478 22
                PERSONALITY, AND ENCULTURATION.                              01478 23
*EXPERIENCE     VIEW THE FILM:  [FOUR FAMILIES, I + II[  ≥FAMILY LIFE IN     01478 11
                JAPAN AND CANDA+ RELATIONSHIP OF A CHILD≤S UPBRINGING TO     01478 12
                DISTINCTIVE NATIONAL TRAITS OF ADULTS IN THESE COUNTRIES+.   01478 13
                DISCUSS:  HOW MARGARET MEAD HAS SHOWN THE CORRELATION        01478 14
                BETWEEN CHILD TRAINING PRACTICES AND ADULT PERSONALITY       01478 15
                SYSTEMS+ HOW THESE PRACTICES AND [NATIONAL CHARACTER[        01478 16
                TRAITS CORRELATE SOMEWHAT DIFFERENTLY IN THE FOUR            01478 17
                CULTURES CITED IN THE FILMS.                                 01478 18
*SETTING        LARGE GROUP  COLLEGE                                         01478 10
*MATERIALS      FILM:  [FOUR FAMILIES, I + II[  MCGRAW-HILL.  30 MIN. EACH   01478  5
*LEVEL          ALL GRADES                                                   01478  8
*GENERAL        ALL CANDIDATES                                               01478  7
*HOURS          1                                                            01478  6
*EVALUATION     COMPARE THE MORE SIGNIFICANT ELEMENTS IN THE CHILD           01478 24
                TRAINING PRACTICES IN THE FOUR CULTURES CITED IN THE FILM.   01478 25

*FILE           CULTURE  NATIONAL CHARACTER  MODAL PERSONALITY               01478  9
```

```
*OBJECTIVES    THE STUDENT CAN RECITE A METHOD BY WHICH IMAGES OF A CHILD01479 16
               ARE EXPRESSED ≥OR [PROJECTED[+ IN COMPLEX INDUSTRIAL       01479 17
               COUNTRIES.                                                 01479 18
*PREREQUISITE PREVIOUS MODULE:  1477 + 1478.                              01479 19
*EXPERIENCE    READ:  [THE IMAGE OF THE CHILD IN CONTEMPORARY FILMS,[     01479 11
               BY MARTHA WOLFENSTEIN.  THEN WRITE AN ANALYSIS OF A        01479 12
               CURRENT COMMERCIAL FILM IN WHICH THE IMAGE OF THE CHILD    01479 13
               IS PROJECTED WITH SUFFICIENT DETAILS TO PROVIDE            01479 14
               MATERIALS FOR A SHORT PAPER.                               01479 15
*SETTING       INDEPENDENT  COLLEGE                                       01479 10
*MATERIALS     ARTICLE:  [THE IMAGE OF THE CHILD IN CONTEMPORARY FILMS,[  01479  5
               BY MARTHA WOLFENSTEIN.  CHILDHOOD IN CONTEMPORARY CULTURES01479
               EDITED BY M. MEAD AND M. WOLFENSTEIN, PP. 272-92.          01479
               UNIVERSITY OF CHICAGO PRESS, 1955.                         01479
*LEVEL         ALL GRADES                                                 01479  8
*GENERAL       ALL CANDIDATES                                             01479  7
*HOURS         3/4                                                        01479  6
*EVALUATION    THE STUDENT CAN WRITE A SHORT PAPER WHICH REVIEWS A        01479 20
               CURRENT MOVIE DEALING WITH ADULT-CHILD RELATIONSHIPS.      01479 21
*FILE          CULTURE  ENCULTURATION  CULTURE                            01479  9

*OBJECTIVES    THE STUDENT CAN IDENTIFY THE IMPORTANT STAGES OF THE LIFE 01480 19
               CYCLE IN HIS OWN CULTURE, AND CAN COMPARE THOSE WITH THAT 01480 20
               OF AN ESKIMO.                                              01480 21
*PREREQUISITE THE CONCEPT OF STATUS PERSONALITY.                          01480 22
*EXPERIENCE    VIEW THE FILM:  [ANGOTEE[  ≥FILM SHOWS THE LIFE OF AN      01480 11
               ESKIMO BOY FROM HIS BIRTH UNTIL HE BECOMES A FULL-FLEDGED 01480 12
               HUNTER AND THE HEAD OF HIS FAMILY.+  LIFE CYCLE.           01480 13
               DISCUSS:  HOW THIS MOVIE IS TO BE A PRELUDE TO AN          01480 14
               EXAMINATION OF THE CONCEPT OF [LIFE CYCLE[  ≥SEE MODULE    01480 15
               19+: HOW THE ESKIMO CHILD PASSES THROUGH THE VARIOUS       01480 16
               STAGES OF THE LIFE CYCLE BY ACQUIRING CERTAIN SKILLS       01480 17
               AND KNOWLEDGE NECESSARY FOR SUCH PROGRESSION.              01480 18
*SETTING       LARGE GROUP  COLLEGE                                       01480 10
*MATERIALS     FILM:  [ANGOTEE[ ≥NFB+  30 MIN.  NATIONAL FILM BOARD OF    01480  5
               CANADA, CANADA HOUSE, N.Y.  ≥680 FIFTH AVE., SUITE 819+    01480
*LEVEL         ALL GRADES                                                 01480  8
*GENERAL       ALL CANDIDATES                                             01480  7
*HOURS         1                                                          01480  6
*EVALUATION    COMPARE THE LIFE CYCLE PHASES IN ESKIMO LIFE WITH THOSE OF01480 23
               A MIDDLE CLASS AMERICAN BORN IN THE 1930≤S.                01480 24
*FILE          CULTURE  PERSONALITY  STATUS PERSONALITY                   01480  9

*OBJECTIVES    THE STUDENT CAN LIST AT LEAST THREE TYPES OF PRESSURES     01481 16
               ON THE CHILD IN OUR CULTURE TO BE ADULTS AND ILLUSTRATE    01481 17
               AT LEAST THREE TYPES OF BARRIERS TO ACHIEVING A SMOOTH     01481 18
               TRANSITION TO ADULTHOOD.                                   01481 19
*PREREQUISITE CONCEPT OF LIFE CYCLE AND ENCULTURATION.                    01481 20
*EXPERIENCE    READ:  [CULTURAL INFLUENCES SHAPING THE ROLE OF THE        01481 11
               CHILD,[ BY SOLON T. KIMBALL.  DISCUSS:  THE PRESSURES ON   01481 12
               CHILDREN TO BECOME ADULTS IN AMERICAN CULTURE AND THE      01481 13
               BARRIERS WHICH INHIBIT THE CHILD≤S EFFORTS IN ACQUIRING    01481 14
               THAT EXPERIENCE NECESSARY FOR ADULTHOOD.                   01481 15
*SETTING       INDEPENDENT  COLLEGE                                       01481 10
*MATERIALS     ARTICLE:  [CULTURAL INFLUENCES SHAPING THE ROLE OF THE     01481  5
               CHILD,[ BY SOLON T. KIMBALL, THE NATIONAL ELEMENTARY       01481
               SCHOOL PRINCIPAL, XL, NO. 1, SEPT. 1960, PP. 18-32.          01481
*LEVEL         ALL GRADES                                                   01481  8
*GENERAL       ALL CANDIDATES                                               01481  7
*HOURS         1                                                            01481  6
*EVALUATION    THE STUDENT CAN PROVIDE HIS OWN COMPARABLE EXPERIENCES       01481 21
               WITH RESPECT TO PRESSURES TO BECOME AN ADULT AND THE         01481 22
               BARRIERS RELATED THERETO.                                    01481 23
*FILE          CULTURE  CULTURE  CHILDHOOD                                  01481  9
_______________________________________________________________________________________

*OBJECTIVES    THE STUDENT CAN LIST FIVE UNIVERSAL CHARACTERISTICS OF       01482 19
               EDUCATION+ CAN IDENTIFY AT LEAST FOUR FACTORS THAT           01482 20
               DISTINGUISH PRIMITIVE FROM MODERN INDUSTRIAL SOCIETIES+      01482 21
               AND CAN COMPARE AT LEAST SIX DIFFERENT DIMENSIONS ALONG      01482 22
               WHICH PRIMITIVE AND MODERN EDUCATION DIFFER.                 01482 23
*PREREQUISITE PREVIOUS MODULE                                               01482 24
*EXPERIENCE    READ:  [EDUCATION IN MODERN AND PRIMITIVE SOCIETIES,[ BY     01482 11
               GEORGE F. KNELLER.  INVITE AN ANTHROPOLOGIST OR SOME OTHER01482 12
               RESOURCE PERSON WHO HAS HAD SOME FIRSTHAND FIELD             01482 13
               EXPERIENCE WITH A PRIMITIVE SOCIETY.  STUDENTS CAN           01482 14
               INTERVIEW SUCH A RESOURCE PERSON IN ORDER TO OBTAIN A        01482 15
               [FEEL[ FOR WHAT LIVING IN A PRIMITIVE SOCIETY MEANS+ WHAT 01482 16
               THE PRIMITIVES WORLD VIEW IS LIKE+ AND HOW CHILD IN SUCH     01482 17
               A SOCIETY BECOMES ENCULTURATED.                              01482 18
*SETTING       INDEPENDENT  COLLEGE                                         01482 10
*MATERIALS     ARTICLE:  [EDUCATION IN MODERN AND PRIMITIVE SOCIETIES,[     01482  5
               BY GEORGE F. KNELLER.  FROM HIS EDUCATIONAL ANTHROPOLOGY, 01482
               PP. 67-79,  WILEY + SONS, 1965.                              01482
*LEVEL         ALL GRADES                                                   01482  8
*GENERAL       ALL CANDIDATES                                               01482  7
*HOURS         1                                                            01482  6
*EVALUATION    CAN LIST WITH CONCRETE EXAMPLES HOW CHILDREN ARE             01482 25
               ENCULTURATED INTO ADULTHOOD IN ONE OR MORE PRIMITIVE         01482 26
               SOCIETIES+ FIVE COMMON CHARACTERISTICS OF THE EDUCATIONAL 01482 27
               PROCESS IN BOTH PRIMITIVE AND MODERN SOCIETIES+ AND SIX      01482 28
               DIMENSIONS ALONG WHICH PRIMITIVE AND MODERN EDUCATIONAL      01482 29
               PRACTICES MIGHT DIFFER.                                      01482 30
*FILE          CULTURE  MODERN  CULTURE                                     01482  9
_______________________________________________________________________________________

*OBJECTIVES    THE STUDENT CAN IDENTIFY ON SIGHT THE DIFFERENCE BETWEEN     01483 18
               [SHOWING IN CONTEXT[ AND [HEARING OUT OF CONTEXT[            01483 19
               LEARNING+ AND CAN CONTRAST THE CONSEQUENCES OF THESE TWO     01483 20
               PATTERNS ON HUMAN LEARNING.                                  01483 21
*PREREQUISITE PREVIOUS MODULE:  1482.                                       01483 22
*EXPERIENCE    READ:  [CULTURE, POLITICS, AND PEDAGOGY,[ BY JEROME S.       01483 11
               BRUNER.  ≥TELLING OUT OF CONTEXT VS. SHOWING IN CONTEXT+     01483 12
               DISCUSS:  FROM THE STANDPOINT OF SOCIAL PSYCHOLOGICAL        01483 13
               FRAME OF REFERENCE HOW PRIMITIVE EDUCATION DIFFERS FROM      01483 14
               MODERN EDUCATIONAL PRACTICE+ WHAT ADVANTAGES AND             01483 15
               DISADVANTAGES EACH ≥PRIMITIVE OR MODERN+ APPROACH HAS FOR 01483 16
               THE LEARNER.                                                 01483 17
*SETTING       INDEPENDENT  COLLEGE                                         01483 10
*MATERIALS     CITED ARTICLE;  IT APPEARS IN SATURDAY REVIEW, MAY 18,       01483  5
               1968, PP. 69-72, 89-90.                                      01483
*LEVEL         ALL GRADES                                                   01483  8
*GENERAL       ALL CANDIDATES                                               01483  7
*HOURS         1                                                            01483  6
*EVALUATION    COMPARE EDUCATIONAL PRACTICES IN PRIMITIVE SOCIETIES WITH 01483 23
               THOSE IN MODERN SOCIETIES.                                   01483 24
*FILE          CULTURE  OUT OF CONTEXT.                                     01483  9
_______________________________________________________________________________________
```

```
*OBJECTIVES      THE STUDENT CAN LIST THE VARIOUS SOCIAL FACTORS THAT ARE  01484 25
                 CHANGED AS THIS SHEIKDOM ACQUIRES WEALTH FROM OIL.  THE   01484 26
                 MOST IMPORTANT GENERALIZATION TO BE GAINED FROM VIEWING   01484 27
                 THIS FILM IS THAT CHANGE IN ONE PART OF THE SOCIAL SYSTEM 01484 28
                 IS OFTEN ACCOMPANIED BY UNINTENDED CONSEQUENCES IN OTHER  01484 29
                 PARTS OF THE SYSTEM.                                      01484 30
*PREREQUISITE    NONE                                                      01484 31
*EXPERIENCE      VIEW THE FILM:  [FAREWELL ARABIA,[ ≥A REPORT OF THE       01484 11
                 CULTURAL CHANGES WHICH THE ACQUISITION OF OIL WEALTH IS   01484 12
                 BRINGING TO A SMALL ARABIAN SHEIKDOM, ABU DHABI.  THE     01484 13
                 HISTORY OF THE SHEIKDOM IS REVIEWED IN THE CONTEXT OF     01484 14
                 ARABIAN HISTORY IN GENERAL.  DHABI≤S RULER STRUGGLES TO   01484 15
                 PRESERVE THE OLD CULTURE FROM TOTAL DESTRUCTION WHILE     01484 16
                 USING HIS NEW WEALTH TO GIVE HIS PEOPLE THE [GOOD LIFE.[  01484 17
                 SCENES WHICH EXEMPLIFY CHANGES IN THE LIFE OF THE PEOPLE  01484 18
                 AND OF THE SHEIK ARE SHOWN.+  DISCUSS:  HOW VARIOUS       01484 19
                 ELEMENTS OF CULTURE ARE RELATED TO EACH OTHER+ HOW A      01484 20
                 CHANGE IN ONE ELEMENT ≥WEALTH FROM OIL+ IS THREATENING TO 01484 21
                 BRING ABOUT CHANGES IN OTHER ELEMENTS+ AND HOW A CONSCIOUS01484 22
                 ATTEMPT IS BEING MADE ON THE PART OF THE [ESTABLISHMENT[  01484 23
                 TO FORESTALL SOME OF THE CHANGES.                         01484 24
*SETTING         LARGE GROUP  COLLEGE                                      01484 10
*MATERIALS       FILM:  [FAREWELL ARABIA[.  NATIONAL EDUCATIONAL TELEVISION01484  5
                 FILM SERVICE, INDIANA UNIVERSITY, BLOOMINGTON.  53 MIN.   01484
*LEVEL           ALL GRADES                                                01484  8
*GENERAL         ALL CANDIDATES                                            01484  7
*HOURS           1 1/2                                                     01484  6
*EVALUATION      THE STUDENT CAN LIST THE FACTORS THAT MAKE FOR CHANGE AND 01484 32
                 FACTORS THAT CONTRIBUTE TO CULTURAL CONSERVATISM IN THIS  01484 33
                 ARABIAN SHEIKDOM.                                         01484 34
*FILE            CULTURE  ELEMENTS ≥OF CULTURE+  CONSERVATISM              01484  9
```

```
*OBJECTIVES      THE STUDENT CAN LIST THE CONSEQUENCES TECHNOLOGICAL CHANGE01485 26
                 HAS HAD ON THE FORMER PLANTATION LABORERS.                01485 27
*PREREQUISITE    PREVIOUS MODULE:  1484.                                   01485 28
*EXPERIENCE      VIEW THE FILM:  [THE PEOPLE LEFT BEHIND.[  ≥DEPICTS THE   01485 11
                 PLIGHT OF MISSISSIPPI<S EXPLANTATION LABORERS.  THE COTTON01485 12
                 PICKING MACHINE, MINIMUM-WAGE LAWS, AND LEGISLATION WHICH 01485 13
                 PAYS FARMERS FOR NOT CULTIVATING LAND HAVE COMBINED TO    01485 14
                 ELIMINATE UNSKILLED JOBS.  FORMER PLANTATION WORKERS      01485 15
                 DESCRIBE THEIR SITUATION AMID SCENES OF THEIR IMPOVERISHED01485 16
                 ENVIRONMENT.  THE REASONS WHY HE SERVES ON THE LOCAL      01485 17
                 POVERTY BOARD ARE PRESENTED BY A PLANTATION OWNER.  IN    01485 18
                 CONTRAST TO THIS, A CONSERVATIVE LAWYER SAYS HE THINKS THE01485 19
                 JOBLESS SHOULD LEAVE MISSISSIPPI.+  DISCUSS:  HOW, AT A   01485 20
                 CERTAIN LEVEL OF CULTURAL ANALYSIS, THIS MISSISSIPPI CASE 01485 21
                 HAS SOME PARALLEL PROBLEMS WITH THOSE FOUND IN THE        01485 22
                 PRECEDING CASE ≥THE ARABIAN SHEIKDOM++ HOW IN THIS        01485 23
                 MISSISSIPPI CASE THE PEOPLE AFFECTED BY CHANGE SEEK HELP  01485 24
                 FROM OUTSIDE GOVERNMENTAL AGENCIES.                       01485 25
*SETTING         LARGE GROUP  COLLEGE                                      01485 10
*MATERIALS       FILM:  [THE PEOPLE LEFT BEHIND.[  NATIONAL EDUCATIONAL    01485  5
                 TELEVISION FILM SERVICE, INDIANA UNIVERSITY, BLOOMINGTON. 01485
                 31 MIN.                                                   01485
*LEVEL           ALL GRADES                                                01485  8
*GENERAL         ALL CANDIDATES                                            01485  7
*HOURS           1                                                         01485  6
*EVALUATION      STUDENT CAN LIST SOME OF THE CONSEQUENCES OF TECHNOLOGICAL01485 29
```

```
              CHANGE ON THE PEOPLE DISPLACED BY TECHNOLOGY.              01485 30
*FILE         CULTURE  TECHNOLOGY  CULTURE                               01485  9
--------------------------------------------------------------------------------

*OBJECTIVES   THE STUDENT CAN IDENTIFY THE [CULTURAL LAG[ EXISTING       01486 29
              BETWEEN THE GENERAL AMERICAN PUBLIC AND THE CHURCH WITH    01486 30
              RESPECT TO PRIESTLY CELIBACY.                              01486 31
*PREREQUISITE PREVIOUS MODULE:  1485.                                    01486 32
*EXPERIENCE   VIEW THE FILM:  [CHALLENGE TO AUTHORITY.[  ≥AN INQUIRY     01486 11
              INTO THE OPINIONS OF VARIOUS PERSONS, LAY AND CLERICAL,    01486 12
              CONCERNING THE CHURCH≤S AUTHORITY IN THE LIVES OF ROMAN    01486 13
              CATHOLICS BEGINING WITH A REVIEW OF VATICAN II.  TWO       01486 14
              SPEAKERS AT A MEETING OF PRIESTS DISCUSS OPPOSITION TO     01486 15
              CELIBACY.  THE LAST MASS OF A FORMER PRIEST IS SHOWN WHILE01486 16
              HE EXPLAINS WHY HE LEFT THE CHURCH.  THIS IS FOLLOWED BY A01486 17
              FORUM WHICH INCLUDES FORMER PRIESTS, LAYMEN, AND BOTH      01486 18
              CONSERVATIVE AND LIBERAL PRIESTS IN A DIALOGUE ON THE      01486 19
              CHURCH≤S AUTHORITY AND THE INDIVIDUAL CONSCIENCE.↑         01486 20
              DISCUSS:  HOW THE CHURCH, AS AN EXAMPLE OF A CULTURAL      01486 21
              SYSTEM PRESERVERING, IS TRYING TO ADAPT ITSELF TO THE      01486 22
              CHANGING CULTURE OF WHICH THE CHURCH IS A PART↓ HOW THE    01486 23
              FORCES OF CHANGE COMING FROM OUTSIDE THE SYSTEM UNDER      01486 24
              CONSIDERATION LEAD TO PRESSURES FOR CHANGE WITHIN THE      01486 25
              SYSTEM↓ HOW THIS LEADS TO [CULTURAL LAG.[  ≥IN LIEU OF THE01486 26
              ABOVE FILM, A CATHOLIC PRIEST MIGHT BE INVITED AS A        01486 27
              RESOURCE PERSON↑.                                          01486 28
*SETTING      LARGE GROUP  COLLEGE                                       01486 10
*MATERIALS    FILM:  [CHALLENGE TO AUTHORITY.[ NATIONAL EDUCATIONAL      01486  5
              TELEVISION.  INDIANA UNIVERSITY.  36 MIN.                  01486
                                                                         01486  8
*LEVEL        ALL GRADES                                                 01486  7
*GENERAL      ALL CANDIDATES                                             01486  6
*HOURS        1
*EVALUATION   THE STUDENT CAN FIND COMPARABLE EXAMPLES OF [CULTURAL LAG[01486 33
              WITHIN THE PRESENT EDUCATIONAL SYSTEM IN THE UNITED        01486 34
              STATES.                                                    01486 35
*FILE         CULTURE  CULTURE  AUTHORITY                                01486  9
--------------------------------------------------------------------------------

*OBJECTIVES   THE STUDENT CAN LIST THE SOCIAL AND CULTURAL CHANGES THAT 01487 21
              ARE BELIEVED TO RESULT IN DELINQUENCY AND ALIENATION IN    01487 22
              OUR SOCIETY.                                               01487 23
*PREREQUISITE PREVIOUS MODULE:  1486.                                    01487 24
*EXPERIENCE   LISTEN TO RECORDED TAPE:  [YOU, YOUTH AND DELINQUENCY.[    01487 11
              BY NICK SETA, DIRECTOR OF EDUCATION, LONGVIEW STATE        01487 12
              HOSPITAL, CINCINNATI, OHIO.  >THE CHANGING SOCIAL MORES OF01487 13
              AN ADVANCING SOCIETY ARE CONSIDERED IN LIGHT OF THEIR      01487 14
              INFLUENCE ON YOUTH.  MATERIALISM, LACK OF SPIRITUAL        01487 15
              SENSITIVITY, AND OVEREMPHASIS ON SEXUAL SYMBOLISM ARE      01487 16
              DISCUSSED.↑  DISCUSS: HOW DR. SETA IS ATTEMPTING TO        01487 17
              SPECIFY ASPECTS OF CONTEMPORARY AMERICAN CULTURE WHICH ARE01487 18
              IN RAPID TRANSITION AND HOW SUCH ASPECTS IS CORRELATED     01487 19
              WITH THE RISING DELINQUENCY RATE.                          01487 20
*SETTING      LARGE GROUP  COLLEGE                                       01487 10
*MATERIALS    RECORDED TAPE:  [YOU, YOUTH AND DELINQUENCY.[ BY NICK      01487  5
              SETA.  DISTRIBUTED BY MCGRAW-HILL SOUND SEMINARS.          01487
              NO. 75904,  30 MINS.                                       01487
*LEVEL        ALL GRADES                                                 01487  8
*GENERAL      ALL CANDIDATES                                             01487  7
*HOURS        3/4                                                        01487  6
*EVALUATION   CAN LIST THE ABOVE MENTIONED [EXTERNAL[ CULTURAL FACTORS   01487 25
              ≥MATERIALISM, LACK OF SPIRITUAL SENSITIVITY, SEX↑ AND MAKE01487 26
```

```
               SOME OBSERVATIONS ABOUT WHETHER OR NOT CONTEMPORARY      01487 27
               SCHOOLS ARE TAKING COGNIZANCE OF SUCH CHANGES.           01487 28
*FILE          CULTURE  DELINQUENCY  CULTURE                            01487  9
```

```
*OBJECTIVES    THE STUDENT CAN LIST THE CHANGE STRATEGIES ASSOCIATED WITH01488 15
               EACH OF THE FOLLOWING EDUCATIONAL PHILOSOPHIES:          01488 16
               EDUCATIONAL PROGRESSIVISM+ CONSERVATISM+                 01488 17
               RECONSTRUCTIONISM.                                       01488 18
*PREREQUISITE  PREVIOUS MODULE:  1487.                                  01488 19
*EXPERIENCE    READ:  [EDUCATION AND CULTURAL CHANGE,[ BY GEORGE F.     01488 11
               KNELLER.  DISCUSS:  THE CONCEPT OF [CULTURAL LAG[ AS     01488 12
               PROFESSOR KNELLER USES IT+ AND HOW DIFFERENT EDUCATIONAL 01488 13
               PHILOSOPHIES VIEW THE PROBLEM OF CULTURE CHANGE.         01488 14
*SETTING       INDEPENDENT  COLLEGE                                     01488 10
*MATERIALS     ARTICLE:  [EDUCATION AND CULTURAL CHANGE,[ BY GEORGE F.  01488  5
               KNELLER.  FROM HIS BOOK, EDUCATIONAL ANTHROPOLOGY,       01488
               PP. 80-94,  WILEY + SONS, 1965.                          01488
*LEVEL         ALL GRADES                                               01488  8
*GENERAL       ALL CANDIDATES                                           01488  7
*HOURS         1                                                        01488  6
*EVALUATION    THE STUDENT CAN MAKE A DECISION FOR HIMSELF AS WHICH OF  01488 20
               THE ABOVE MENTIONED POINTS OF VIEW TO TAKE WITH REFERENCE 01488 21
               TO THE PROBLEM OF CHANGE.                                01488 22
*FILE          CULTURE  CONSERVATISM  RECONSTRUCTIONISM                 01488  9
```

```
*OBJECTIVES    THE STUDENT CAN DISTINGUISH BETWEEN [CULTURAL CHANGE[    01489 15
               AND [CULTURAL DISCONTINUITY[+ PROVIDE AT LEAST THREE     01489 16
               EXAMPLES OF [DISCONTINUITIES[ IN AMERICAN CULTURE+ AND   01489 17
               RECITE THE ATTITUDES OF EDUCATIONAL CONSERVATIVES,       01489 18
               PROGRESSIVES AND ANTHROPOLOGISTS TOWARD THESE            01489 19
               [DISCONTINUITIES.[                                       01489 20
*PREREQUISITE  CAN DESCRIBE THE PHILOSOPHY OF EDUCATIONAL PROGRESSIVES  01489 21
               AND CONSERVATIVES+ THE CONCEPT OF CULTURAL CHANGE+ AND   01489 22
               DIFFERENCES IN EDUCATIONAL PRACTICES IN PRIMITIVE AND    01489 23
               MODERN SOCIETIES.                                        01489 24
*EXPERIENCE    READ:  [EDUCATION AND DISCONTINUITY,[ BY GEORGE F. KNELLER01489 11
               DISCUSS:  WHAT IS MEANT BY [CULTURAL DISCONTINUITY[ AND  01489 12
               HOW IT IS OR IS NOT RELATED TO THE CURRENT PHRASEOLOGY   01489 13
               OF [GENERATION GAP.[                                     01489 14
*SETTING       INDEPENDENT  COLLEGE                                     01489 10
*MATERIALS     ARTICLE:  [EDUCATION AND DISCONTINUITY,[ BY GEORGE F.    01489  5
               KNELLER, IN HIS EDUCATIONAL ANTHROPOLOGY, PP. 95-114.    01489
               WILEY + SONS, 1965.                                      01489
*LEVEL         ALL GRADES                                               01489  8
*GENERAL       ALL CANDIDATES                                           01489  7
*HOURS         1                                                        01489  6
*EVALUATION    WRITTEN TEST.  COMPARE HOW THE EDUCATIONAL CONSERVATIVES, 01489 25
               PROGRESSIVES AND ANTHROPOLOGISTS APPROACH THIS PROBLEM OF 01489 26
               [CULTURAL DISCONTINUITY[ >I.E., [GENERATION GAP[*.       01489 27
*FILE          CULTURE  CULTURAL DISCONTINUITY  CULTURE                 01489  9
```

```
*OBJECTIVES    THE STUDENT CAN IDENTIFY SOME OF THE CULTURALLY-INDUCED  01490 15
               DISCONTINUITIES IN FAMILY AND NEIGHBORHOOD LIFE IN       01490 16
               THE U.S.                                                 01490 17
*PREREQUISITE  PREVIOUS MODULE:  1489.                                  01490 18
*EXPERIENCE    READ:  [FAMILY AND NEIGHBORHOOD,[ BY PHILIP COX AND BLAINE01490 11
               MERCER.  DISCUSS:  THE CULTURAL CONTINUITIES AND         01490 12
               DISCONTINUITIES IN THE AMERICAN MIDDLE CLASS FAMILY AND  01490 13
               IN THE SUBURBAN NEIGHBORHOOD.                          01490 14
*SETTING       INDEPENDENT  COLLEGE                                   01490 10
*MATERIALS     ARTICLE:  [FAMILY AND NEIGHBORHOOD,[ BY COX AND MERCER. 01490  5
               FROM THEIR EDUCATION IN DEMOCRACY, PP. 62-73.          01490
               MCGRAW-HILL, 1961.  ALSO IN CHILCOTT 21968: 383-391+   01490
*LEVEL         ALL GRADES                                             01490  8
*GENERAL       ALL CANDIDATES                                         01490  7
*HOURS         1                                                      01490  6
*EVALUATION    THE STUDENT CAN DESCRIBE WHY SOME OF THE ABOVE-MENTIONED 01490 19
               CULTURAL DISCONTINUITIES MIGHT BE REMOVED, WHILE OTHERS 01490 20
               WOULD BE MORE DIFFICULT TO ERADICATE.                  01490 21
*FILE          CULTURE  FAMILY  NEIGHBORHOOD                          01490  9
```

```
*OBJECTIVES    THE STUDENT CAN IDENTIFY SOME OF THE CULTURALLY-INDUCED 01491 16
               DISCONTINUITIES BETWEEN THE SCHOOL AND THE PEER GROUPS 01491 17
               IN THE U.S.                                            01491 18
*PREREQUISITE PREVIOUS MODULE:  1490.                                 01491 19
*EXPERIENCE    READ:  [THE SCHOOL, THE PEER GROUP, AND ADOLESCENT     01491 11
               DEVELOPMENT,[ BY RICHARD L. SIMPSON AND IDA HARPER     01491 12
               SIMPSON,  DISCUSS:  THE DIRECTION AND NATURE OF CULTURAL 01491 13
               DISCONTINUITIES EXISTING BETWEEN THE SCHOOL AND THE    01491 14
               PEER GROUP STRUCTURE IN CONTEMPORARY AMERICAN LIFE.    01491 15
*SETTING       INDEPENDENT  COLLEGE                                   01491 10
*MATERIALS     ARTICLE:  [THE SCHOOL, THE PEER GROUP, AND ADOLESCENT  01491  5
               DEVELOPMENT,[ BY RICHARD L. AND IDA HARPER SIMPSON.    01491
               JR. OF EDUCATIONAL SOCIOLOGY, XXXII, NO. 1 >SEPTEMBER  01491
               1958+ PP. 37-41.  ALSO IN CHILCOTT 21968: 392+         01491
*LEVEL         ALL GRADES                                             01491  8
*GENERAL       ALL CANDIDATES                                         01491  7
*HOURS         1                                                      01491  6
*EVALUATION    CAN DESCRIBE THE SPECIFIC KINDS OF CULTURAL            01491 20
               DISCONTINUITIES BETWEEN PEER GROUP AND THE SCHOOL AND SOME01491 21
               SPECULATIONS AS TO WHY THESE DISCONTINUITIES MIGHT     01491 22
               CONTINUE.                                              01491 23
*FILE          CULTURE  PEER GROUP  SCHOOL                            01491  9
```

```
*OBJECTIVES    CAN DESCRIBE THE CONCEPT OF CULTURAL VALUES+ CAN CITE  01492 20
               THREE GENERAL TYPES OF VALUE CONFLICT PARTICULARLY     01492 21
               RELEVANT FOR EDUCATION+ AND WHAT APPROACHES ARE BEING  01492 22
               SUGGESTED TO REDUCE THE CONFLICT.                      01492 23
*PREREQUISITE THE CONCEPTS OF CULTURE CHANGE AND CULTURAL             01492 24
               DISCONTINUITY SHOULD BE UNDERSTOOD BY THE STUDENT.     01492 25
*EXPERIENCE    READ:  [EDUCATION AND CULTURAL VALUES[ BY GEORGE F.    01492 11
               KNELLER,  DISCUSS:  THE CONCEPT OF CULTURAL VALUES, SOME 01492 12
               EXAMPLES OF VALUE CONFLICT IN THE CONTEMPORARY AMERICAN 01492 13
               CULTURE, AND HOW THESE VALUE CONFLICTS ARE BEING HANDLED. 01492 14
               OPTIONAL EXPERIENCE:  THE STUDENT MAY BE ASKED TO SELECT 01492 15
               FROM A CURRENT NEWSPAPER THREE EXAMPLES OF VALUE CONFLICT.01492 16
               HOW THESE VALUES WERE BROUGHT TO THE ATTENTION OF THE  01492 17
               JOURNALIST, AND WHAT SOLUTIONS ARE BEING SOUGHT TO     01492 18
               AMELIORATE THE CONFLICTS.                              01492 19
*SETTING       INDEPENDENT  COLLEGE                                   01492 10
*MATERIALS     ARTICLE:  [EDUCATION AND CULTURAL VALUES[ BY G. F.     01492  5
               KNELLER IN HIS EDUCATIONAL ANTHROPOLOGY, PP. 115-134.  01492
               WILEY + SONS, 1965.                                    01492
*LEVEL         ALL GRADES                                             01492  8
*GENERAL       ALL CANDIDATES                                         01492  7
*HOURS         1                                                      01492  6
*EVALUATION    COMPARE THE APPROACHES OF EDUCATIONAL CONSERVATIVES WITH 01492 26
```

```
              THAT OF EDUCATIONAL PROGRESSIVES ON THESE THREE TYPES OF  01492 27
              VALUE CONFLICTS:  ≥1↑ IDEAL VS. MANIFEST VALUES,          01492 28
              ≥2↑ TRADITIONAL VS. EMERGENT VALUES, AND ≥3↑ DOMINANT     01492 29
              VS. MINORITY VALUES.                                      01492 30
*FILE         CULTURE  VALUE CONFLICT  TRADITIONAL                      01492  9
```

```
*OBJECTIVES   THE STUDENT CAN IDENTIFY EXAMPLES OF THE CONFLICT BETWEEN 01493 15
              TRADITIONAL AND EMERGENT VALUES IN AMERICAN SOCIETY.      01493 16
*PREREQUISITE TRADITIONAL VS. EMERGENT VALUES OF CULTURE.               01493 17
*EXPERIENCE   READ:  [U.S. IDEALS CANCEL OUT EACH OTHER,[ BY SYDNEY J.  01493 11
              HARRIS.  DISCUSS THIS ARTICLE IN TERMS OF [TRADITIONAL[   01493 12
              VS. [EMERGENT[ VALUES AS DESCRIBED BY GEORGE KNELLER      01493 13
              ≥SEE PREVIOUS MODULE↑.                                    01493 14
*SETTING      INDEPENDENT  COLLEGE                                      01493 10
*MATERIALS    LISTED ARTICLE.  FROM HIS BOOK, MAJORITY OF ONE,          01493  5
              PP. 84-85.  HOUGHTON MIFFLIN, 1957.  C-206                01493
*LEVEL        ALL GRADES                                                01493  8
*GENERAL      ALL CANDIDATES                                            01493  7
*HOURS        1/2                                                       01493  6
*EVALUATION   COMPARE SEVERAL INSTANCES WHERE TRADITIONAL AND EMERGENT  01493 18
              VALUES ARE IN CONFLICT.  MAKE A LIST OF CONFLICTING       01493 19
              VALUES GIVEN BY HARRIS ≥IN ABOVE LISTED ARTICLE↑.         01493 20
*FILE         CULTURE  EMERGENT  CONFLICT                               01493  9
```

```
*OBJECTIVES   THE STUDENT CAN SPECIFY FIVE EXAMPLES OF TRADITIONAL      01494 17
              AMERICAN VALUES THAT PLAYED A ROLE IN OUR EDUCATIONAL     01494 18
              SYSTEM.                                                   01494 19
*PREREQUISITE PREVIOUS MODULE:  1493.                                   01494 20
*EXPERIENCE   READ:  [TRADITIONAL VALUES AND THE SHAPING OF AMERICAN    01494 11
              EDUCATION,[ BY MERLE L. BORROWMAN.  DISCUSS:  SOME        01494 12
              EXAMPLES OF [TRADITIONAL VALUES[ THAT PLAYED A ROLE IN    01494 13
              DETERMINING THE STRUCTURE OF AMERICAN EDUCATION; HOW      01494 14
              [EMERGING VALUES[ MIGHT INDUCE CHANGES IN THE EDUCATIONAL 01494 15
              SYSTEM.                                                   01494 16
*SETTING      INDEPENDENT  COLLEGE                                      01494 10
*MATERIALS    ARTICLE:  [TRADITIONAL VALUES AND THE SHAPING OF AMERICAN 01494  5
              EDUCATION,[ BY MERLE L. BORROWMAN.  REPRINTED IN J. H.    01494
              CHILCOTT ET. AL. ≥EDS.↑, READINGS IN SOCIO-CULTURAL       01494
              FOUNDATIONS OF EDUCATION, PP. 162-80.  WADSWORTH, 1968.   01494
*LEVEL        ALL GRADES                                                01494  8
*GENERAL      ALL CANDIDATES                                            01494  7
*HOURS        1                                                         01494  6
*EVALUATION   CAN DESCRIBE THREE OR FOUR SALIENT TRADITIONAL            01494 21
              AMERICAN VALUES.                                          01494 22
*FILE         CULTURE  VALUE  EMERGENT                                  01494  9
```

```
*OBJECTIVES   THE STUDENT CAN DESCRIBE WITH CONCRETE DETAILS THE        01495 26
              DOMINANT VS. MINORITY GROUP VALUE CONFLICTS.  SUCH        01495 27
              CONCRETE DETAILS MAY BE USED IN HIS TEACHING SITUATION FOR01495 28
              ILLUSTRATING A PARTICULAR SOCIAL PROBLEM.                 01495 29
*PREREQUISITE CAN DESCRIBE THE CONCEPT OF CULTURAL VALUE.  UNDERSTANDS  01495 30
              THE THREE TYPES OF VALUE CONFLICTS ≥I.E., IDEAL VS.       01495 31
              MANIFEST VALUES; TRADITIONAL VS. EMERGENT VALUES; AND      01495 32
              DOMINANT VS. MINORITY VALUES↑.                            01495 33
*EXPERIENCE   VIEW FILM:  [THE LAST MENOMINEE[  ≥A SERIES OF INTERVIEWS 01495 11
              FILMED ON LOCATION IN MENOMINEE COUNTY, WISCONSIN, DURING 01495 12
              WHICH VARIOUS MENOMINEES DESCRIBE THEIR DOUBTS, THEIR     01495 13
              HOPES FOR THE FUTURE, AND THE PROBLEMS WHICH THEY NOW     01495 14
```

```
               FACE DUE TO THE TERMINATION OF THEIR RESERVATION STATUS BY01495 15
               THE BUREAU OF INDIAN AFFAIRS.  THE MENOMINEE INDIANS HAVE 01495 16
               GAINED CITIZENSHIP, BUT THEY HAVE LOST THEIR HUNTING AND  01495 17
               FISHING RIGHTS AND LACK FOOD AS A RESULT.  THEY ARE ALSO  01495 18
               WITHOUT DOCTORS AND HOSPITALS.  ADEQUATE EDUCATION AND    01495 19
               EMPLOYMENT ARE NO LONGER AVAILABLE.*  DISCUSS:  THIS      01495 20
               MENOMINEE CASE AS AN EXAMPLE OF (DOMINANT VS. MINORITY(   01495 21
               VALUE CONFLICT, HOW THE ACTION OF THE INDIAN AFFAIRS      01495 22
               BUREAU REFLECT DOMINANT VALUES, WHILE THE MENOMINEE       01495 23
               INDIANS VALUE ILLUSTRATE ONE TYPE OF MINORITY GROUP       01495 24
               VALUES.                                                   01495 25
*SETTING       LARGE GROUP  COLLEGE                                      01495 10
*MATERIALS     FILM:  (THE LAST MENOMINEE(  NATIONAL EDUCATIONAL         01495  5
               TELEVISION FILM SERVICE, INDIANA UNIVERSITY.  30 MIN.     01495
*LEVEL         ALL GRADES                                                01495  8
*GENERAL       ALL CANDIDATES                                            01495  7
*HOURS         1                                                         01495  6
*EVALUATION    DESCRIBE THE STEPS THAT NEED TO BE UNDERTAKEN IN ORDER TO 01495 34
               RESOLVE THIS VALUE CONFLICT.                              01495 35
*FILE          CULTURE  MINORITY  VALUE CONFLICT                         01495  9
```

```
*OBJECTIVES    THE STUDENT CAN RECITE THE ROLE EDUCATION MUST PLAY IF    01496 16
               THE VALUE CONFLICT BETWEEN INDIAN-AND-WHITE CULTURES ARE  01496 17
               ARE TO BE RESOLVED.                                       01496 18
*PREREQUISITE CAN DESCRIBE THE CONCEPT OF CULTURAL VALUES AND VALUE     01496 19
               CONFLICT.  UNDERSTANDS THREE GENERAL TYPES OF VALUE       01496 20
               CONFLICTS.                                                01496 21
*EXPERIENCE    READ:  (WORLDS APART( BY EDWARD H. SPICER.  DISCUSS:  THE 01496 11
               PURPOSE OF THE LESSON, HOW VALUES ARE DEEPLY ENMESHED     01496 12
               IN THE INDIAN CHILDS PERSONALITY, AND HOW THESE VALUES    01496 13
               PREVENT MANY INDIAN CHILDREN FROM BENEFITING FROM THEIR   01496 14
               U.S. EDUCATIONAL EXPERIENCE.                              01496 15
*SETTING       INDEPENDENT  COLLEGE                                      01496 10
*MATERIALS     ARTICLE:  (WORLDS APART,( BY EDWARD H. SPICER.  ARIZONA   01496  5
               QUARTERLY, XIII, NO. 3 2AUTUMN 1957*, PP. 198-208, 228-30.01496
*LEVEL         ALL GRADES                                                01496  8
*GENERAL       ALL CANDIDATES                                            01496  7
*HOURS         1                                                         01496  6
*EVALUATION    PLAN AN IDEAL CURRICULUM FOR INDIAN CHILDREN OF THE       01496 22
               SOUTHWEST THAT MAY AID IN REDUCING THE VALUE CONFLICT     01496 23
               BETWEEN INDIANS AND WHITES.                               01496 24
*FILE          CULTURE  PERSONALITY  VALUE                               01496  9
```

```
*OBJECTIVES    THE STUDENT CAN ILLUSTRATE THE DIFFERENCE BETWEEN         01497 17
               (IDEAL( AND (MANIFEST( CULTURE.                           01497 18
*PREREQUISITE PREVIOUS MODULE 1495.                                     01497 19
*EXPERIENCE    VIEW THE FILM:  (WHERE IS PREJUDICE*(  DISCUSS:  THE      01497 11
               PURPOSE OF THE LESSON, HOW THE 12 COLLEGE STUDENTS OF     01497 12
               DIFFERENT RACES AND FAITHS THOUGH SUBSCRIBING TO A        01497 13
               CULTURAL IDEAL OF NONPREJUDICE REVEAL SOME LATENT         01497 14
               PREJUDICES, HOW SUBTLY CULTURAL FORCES SHAPE OUR BEHAVIOR.01497 15
               2THIS IS OPTIONAL - AN ALTERNATIVE TO MODULE = 48*        01497 16
*SETTING       LARGE GROUP  COLLEGE                                      01497 10
*MATERIALS     FILM:  (WHERE IS PREJUDICE*(  NATIONAL EDUCATIONAL        01497  5
               TELEVISION, INDIANA UNIVERSITY, BLOOMINGTON, INDIANA.     01497
*LEVEL         ALL GRADES                                                01497  8
*GENERAL       ALL CANDIDATES                                            01497  7
*HOURS         1                                                         01497  6
*EVALUATION    DESCRIBE TWO OTHER INSTANCES IN WHICH (IDEAL( AND (REAL(  01497 20
               CULTURE TRAITS ARE FOUND IN OUR SOCIETY.                01497 21
*FILE          CULTURE  MANIFEST VALUES  CULTURE                         01497  9
```

```
*OBJECTIVES    THE STUDENT CAN REPRODUCE THE METHODS BY WHICH AN       01498 16
               CURRICULAR PROJECT CAN BE EXAMINED WITH RESPECT TO      01498 17
               POSSIBLE (IDEAL( VS. (MANIFEST( VALUE CONFLICTS.         01498 18
*PREREQUISITE  CAN DESCRIBE THE CONCEPTS OF CULTURAL VALUES AND VALUE  01498 19
               CONFLICT.                                                01498 20
*EXPERIENCE    READ:  (DISCREPANCIES IN THE TEACHING OF AMERICAN       01498 11
               CULTURE,( BY DOROTHY LEE.  DISCUSS:  HOW ANTHROPOLOGIST  01498 12
               DOROTHY LEE HAS FOUND EVIDENCE FOR CONFLICT BETWEEN      01498 13
               (IDEAL( AND (MANIFEST( VALUES IN THE TEACHING OF A       01498 14
               HOME ECONOMICS PROGRAM.                                  01498 15
*SETTING       INDEPENDENT  COLLEGE                                     01498 10
*MATERIALS     ARTICLE LISTED.  SEE GEORGE D. SPINDLER, ED., EDUCATION  01498  5
               AND CULTURE, HOLT, RINEHART AND WINSTON, 1963, PP. 173-91.01498
*LEVEL         ALL GRADES                                               01498  8
*GENERAL       ALL CANDIDATES                                           01498  7
*HOURS         1                                                        01498  6
*EVALUATION    COMPARE THE (IDEAL( VS. (MANIFEST( VALUES PRESENT IN A   01498 21
               CURRICULUM WHICH THE INSTRUMENT PRESENTS.                01498 22
*FILE          CULTURE  MANIFEST VALUES  CULTURE                        01498  9
```

```
*OBJECTIVES    THE STUDENT CAN EXAMINE WITH REFERENCE TO A SPECIFIC     01499 17
               PROBLEM THE CONFLICT BETWEEN DOMINANT MINORITY GROUP     01499 18
               VALUES AND CAN LIST AT LEAST 5 SPECIFIC STEPS SUGGESTED  01499 19
               FOR REDUCING THIS CONFLICT.                              01499 20
*PREREQUISITE  THE CONCEPTS OF CULTURE, CULTURAL VALUE, AND DOMINANT VS. 01499 21
               MINORITY GROUP VALUES.                                   01499 22
*EXPERIENCE    READ:  (TEACHING THE CULTURALLY DISADVANTAGED( BY        01499 11
               JAMES E. MYERS AND KALIL I. GEZI.  DISCUSS:  THE EVIDENCE 01499 12
               FOR THE CONFLICT BETWEEN DOMINANT AND MINORITY GROUP     01499 13
               VALUES IN THE SCHOOL SITUATION, AND WHAT THE AUTHORS,    01499 14
               MYERS AND GEZI, SUGGEST MAY BE DONE TO REDUCE THIS       01499 15
               CONFLICT.                                                01499 16
*SETTING       INDEPENDENT  COLLEGE                                     01499 10
*MATERIALS     ARTICLE:  (TEACHING THE CULTURALLY DISADVANTAGED,( BY    01499  5
               J. E. MYERS AND K. I. GEZI IN GEZI AND MYERS >EDS.,      01499
               TEACHING IN AMERICAN CULTURE, PP. 172-87.  HOLT,         01499
               RINEHART, WINSTON, 1968.                                 01499
*LEVEL         ALL GRADES                                               01499  8
*GENERAL       ALL CANDIDATES                                           01499  7
*HOURS         1                                                        01499  6
*EVALUATION    THE STUDENT CAN DISCUSS THE KINDS OF SOCIAL RESEARCH DATA 01499 23
               NEEDED TO IMPLEMENT THE FIVE STEPS RECOMMENDED BY MYERS  01499 24
               AND GEZI FOR AMELIORATING THE SAID CONFLICT.             01499 25
*FILE          CULTURE  CULTURE  CONFLICT                               01499  9
```

```
*OBJECTIVES    THE STUDENT CAN EXAMINE IN DEPTH A SINGLE CASE OF THE    01500 17
               CONFLICT BETWEEN IDEAL CULTURE AND MANIFEST CULTURE IN   01500 18
               OUR SOCIETY.  HE CAN ALSO COMPARE THE THREE STRATEGIES   01500 19
               SUGGESTED BY BROOKOVER AND GOTTLEIB AND SELECT ONE WHICH 01500 20
               APPEALS TO HIM MOST.                                     01500 21
*PREREQUISITE  THE CONCEPTS OF CULTURE, CULTURAL VALUE, AND IDEAL VS.   01500 22
               MANIFEST CULTURE.                                        01500 23
*EXPERIENCE    READ:  (SOCIAL CLASS AND EDUCATION( BY WILBUR BROOKOVER  01500 11
               AND DAVID GOTTLEIB, >DOMINANT VS. MINORITY VALUES,       01500 12
               DISCUSS:  THE EVIDENCE FOR THE DISPARITY BETWEEN THE     01500 13
               IDEAL VALUE ≥EQUALITY OF OPPORTUNITY+ AND MANIFEST CULTURE01500 14
               WITH REGARD TO EDUCATION+ AND THE THREE APPROACHES IN      01500 15
               WHICH THIS DISSONANCE MAY BE REDUCED.                      01500 16
*SETTING       INDEPENDENT  COLLEGE                                       01500 10
*MATERIALS     ARTICLE:  [SOCIAL CLASS AND EDUCATION[ BY BROOKOVER        01500  5
               AND GOTTLEIB.  FROM THEIR A SOCIOLOGY OF EDUCATION.        01500
               PP. 153-74 + 188-92.  AMERICAN BOOK CO., 1964.  REPRINTED 01500
               IN GEZI AND MYERS VOLUME                                   01500
*LEVEL         ALL GRADES                                                 01500  8
*GENERAL       ALL CANDIDATES                                             01500  7
*HOURS         1                                                          01500  6
*EVALUATION    LIST THE THREE ALTERNATIVE EDUCATIONAL POLICIES LISTED     01500 24
               BY BROOKOVER AND GOTTLEIB AND LIST THE ADVANTAGES AND      01500 25
               DISADVANTAGES OF EACH ALTERNATIVE POLICY.                  01500 26
*FILE          CULTURE  MANIFEST VALUES  DISSONANCE                       01500  9
```

```
*OBJECTIVES    THE STUDENT CAN DESCRIBE THE NATURE OF THE EXPLOSIVE       01501 23
               CHANGES TAKING PLACE IN OUR CULTURE AND CAN LIST HOW       01501 24
               DIFFERENT EDUCATIONAL [SCHOOLS[ CLING TO DIFFERING         01501 25
               APPROACHES TO THIS PROBLEM.                                01501 26
*PREREQUISITE CAN DESCRIBE IN GENERAL THE [WHOLE CULTURES[ OF PRIMITIVE 01501 27
               SOCIETIES AND CAN COMPARE THEM WITH THE FRAGMENTED NATURE 01501 28
               OF THE CULTURE IN MODERN INDUSTRIAL SOCIETIES.             01501 29
*EXPERIENCE    READ:  [CURRICULUM AND TEACHER IN CULTURAL PERSPECTIVE[    01501 11
               BY GEORGE F. KNELLER.  DISCUSS:  ≥1+ FROM THE CULTURAL     01501 12
               STANDPOINT, THE PROBLEM OF DESIGNING A CURRICULUM FOR A    01501 13
               RAPIDLY CHANGING CULTURE+ AND HOW CONSERVATIVE AND         01501 14
               PROGRESSIVE EDUCATORS APPROACH THIS PROBLEM DIFFERENTLY,   01501 15
               AND ≥2+ THE DUAL PROBLEM OF KNOWLEDGE EXPLOSION AND        01501 16
               FRAGMENTATION OF INFORMATION ≥[CAN THE SCHOOL TEACH THE    01501 17
               WHOLE CULTURE-[+ AND HOW THE EDUCATIONAL CONSERVATIVES     01501 18
               AND PROGRESSIVES DIFFER ON THIS ISSUE.  *[NO ONE WILL LIVE01501 19
               ALL HIS LIFE IN THE WORLD INTO WHICH HE WAS BORN, AND NO   01501 20
               ONE WILL DIE IN THE WORLD IN WHICH HE WORKED IN HIS        01501 21
               MATURITY.[  --MARGARET MEAD.                               01501 22
*SETTING       INDEPENDENT  COLLEGE                                       01501 10
*MATERIALS     ARTICLE LISTED.  SEE GEORGE F. KNELLER, EDUCATIONAL        01501  5
               ANTHROPOLOGY, N. Y., WILEY, 1965, PP. 135-62.              01501
*LEVEL         ALL GRADES                                                 01501  8
*GENERAL       ALL CANDIDATES                                             01501  7
*HOURS         1                                                          01501  6
*EVALUATION    COMPARE THE APPROACHES OF THE EDUCATIONAL CONSERVATIVES    01501 30
               AND EDUCATIONAL PROGRESSIVES WITH RESPECT TO THE ISSUES    01501 31
               OF:  ≥1+ DESIGNING A CURRICULUM FOR A FAST-CHANGING        01501 32
               CULTURE, AND ≥2+ DESIGNING A CURRICULUM FOR A HIGHLY       01501 33
               SPECIALIZED AND FRAGMENTED CULTURAL SYSTEM.                01501 34
*FILE          CULTURE  FRAGMENTED CULTURE  CULTURE                       01501  9
```

```
*OBJECTIVES    THE STUDENT CAN DESCRIBE WHAT IS MEANT BY [LATERAL         01502 18
               TRANSMISSION OF KNOWLEDGE[ AND HOW, IF THIS CONCEPT IS     01502 19
               ADOPTED, IT WOULD AFFECT A REDEFINITION OF OUR PRIMARY     01502 20
               AND SECONDARY EDUCATIONAL CURRICULUM.                      01502 21
*PREREQUISITE CAN DESCRIBE THE OUTLINES OF OUR FAST-MOVING CULTURE AND  01502 22
               WHAT THIS CULTURE CHANGE MEANS FOR A REDEFINITION OF OUR  01502 23
               EDUCATIONAL SYSTEM.  ≥SEE PREVIOUS MODULE:  1501+          01502 24
*EXPERIENCE    READ:  [A REDEFINITION OF EDUCATION,[ BY MARGARET MEAD.    01502 11
               ≥SHE SUGGESTS A [LATERAL TRANSMISSION[ DUE TO CULTURAL     01502 12
               CHANGE+  - CURRICULUM CHANGES -  DISCUSS:  HOW             01502 13
               ANTHROPOLOGIST MARGARET MEAD CRITICIZES THE PREVAILING     01502 14
```

```
              ANALYSES OF CURRENT EDUCATIONAL [ILLS[ AND WHAT SHE          01502 15
              PROPOSES AS A MORE REALISTIC WAY OF REDEFINING OUR           01502 16
              EDUCATIONAL NEEDS.                                           01502 17
*SETTING      INDEPENDENT  COLLEGE                                         01502 10
*MATERIALS    ARTICLE:  [A REDEFINITION OF EDUCATION,[ BY MARGARET MEAD.01502  5
              NEA JOURNAL ≥OCTOBER 1959+, PP. 15-17.                       01502
*LEVEL        ALL GRADES                                                   01502  8
*GENERAL      ALL CANDIDATES                                               01502  7
*HOURS        1                                                            01502  6
*EVALUATION   COMPARE [VERTICAL TRANSMISSION OF KNOWLEDGE[ WITH [LATERAL01502 25
              TRANSMISSION OF KNOWLEDGE.[  LIST FOUR CHANGES THAT WOULD 01502 26
              TAKE PLACE IN THE PRESENT EDUCATIONAL CURRICULUM, IF         01502 27
              MEADS NOTION OF [LATERAL TRANSMISSION OF KNOWLEDGE[          01502 28
              WERE ADOPTED.                                                01502 29
*FILE         CULTURE  VERTICAL TRANSMISSION  CULTURE CHANGE               01502  9
```

```
*OBJECTIVES   THE STUDENT CAN IDENTIFY HIS TRAINING FOR BECOMING A         01503 17
              PROFESSIONAL TEACHER AS AN [ENCULTURATING[ ≥OR               01503 18
              ACCULTURATING+ PROCESS.  HE CAN ALSO IDENTIFY FOUR           01503 19
              COMMON ADAPTIVE RESPONSES THE STUDENT MAKES WHILE HE IS      01503 20
              UNDERGOING [ENCULTURATION.[                                  01503 21
*PREREQUISITE CAN DESCRIBE THE CONCEPT OF [ENCULTURATION.[                 01503 22
*EXPERIENCE   READ:  [THE ACCULTURATION OF THE SCHOOL TEACHER.[ BY         01503 11
              GEORGE D. SPINDLER.  INTERVIEW AN EXPERIENCED TEACHER        01503 12
              ABOUT HIS ACCULTURATION ≥OR [ENCULTURATION[+ EXPERIENCES     01503 13
              IN BECOMING A PROFESSIONAL INSTRUCTOR.  IDENTIFY WHICH OF    01503 14
              THE FOUR [ADAPTIVE RESPONSE[ THIS INTERVIEWEE MADE IN THE    01503 15
              COURSE OF THIS ENCULTURATING EXPERIENCE.                     01503 16
*SETTING      INDEPENDENT  SCHOOL                                          01503 10
*MATERIALS    THE LISTED ARTICLE IS REPRINTED IN J. H. CHILCOTT AND        01503  5
              OTHERS ≥EDS.+, READINGS IN SOCIO-CULTURAL FOUNDATIONS OF     01503
              EDUCATION, PP. 454-57.  WADSWORTH, 1968.                     01503
*LEVEL        ALL GRADES                                                   01503  8
*GENERAL      ALL CANDIDATES                                               01503  7
*HOURS        1                                                            01503  6
*EVALUATION   LIST THE FOUR [ADAPTIVE RESPONSES[ COMMONLY MADE TO AN       01503 23
              [ENCULTURATION[ EXPERIENCE.  DESCRIBE THE CRITICAL FACTORS01503 24
              THAT INFLUENCE THE TAKING OF ONE OF THESE ADAPTIVE           01503 25
              RESPONSES IN PREFERENCE TO OTHERS.                           01503 26
*FILE         CULTURE  ENCULTURATION  ACCULTURATION                        01503  9
```

```
*OBJECTIVES   THE STUDENT CAN USE THIS EXPERIENCE MODULE AS AN             01504 18
              OPPORTUNITY TO REVIEW THE CONCEPT OF CULTURE AS IT RELATES01504 19
              TO EDUCATION AND THE ROLE OF THE TEACHER IN THE              01504 20
              TRANSMISSION OF CULTURE.                                     01504 21
*PREREQUISITE THE CONCEPT OF CULTURE, CULTURAL CHANGE, CULTURAL            01504 22
              DISCONTINUITIES, AND CULTURAL VALUES.                        01504 23
*EXPERIENCE   READ:  [THE CONTRIBUTIONS OF ANTHROPOLOGY TO THE EDUCATION01504 11
              OF THE TEACHER,[ BY ROBERT REDFIELD.  DISCUSS:  THE          01504 12
              CONCEPTS OF [INTEGRATED CULTURE[ VS. [HETEROGENEOUS          01504 13
              CULTURE[ AND HOW THESE CONCEPTS MAY BE DISTINGUISHED IN      01504 14
              TERMS OF SHORT RUN IN TIME AND LONG RUN IN TIME.  DISCUSS 01504 15
              ALSO HOW THESE PAIRED CONCEPTS ARE NECESSARY IN THE          01504 16
              EDUCATION OF A TEACHER.                                      01504 17
*SETTING      INDEPENDENT  COLLEGE                                         01504 10
*MATERIALS    LISTED ARTICLE IS REPRINTED IN J. H. CHILCOTT, ET. AL.       01504  5
              ≥EDS.+  READINGS IN THE SOCIO-CULTURAL FOUNDATIONS OF        01504
              EDUCATION, PP. 153-5..  WADSWORTH, 1968.                      01504
*LEVEL        ALL GRADES                                                   01504  8
```

```
*GENERAL      ALL CANDIDATES                                        01504  7
*HOURS        1                                                     01504  6
*EVALUATION   DESCRIBE HOW REDFIELD RESOLVES THE QUESTION OF TEACHING AN01504 24
              [INTEGRATED CULTURE[ IN THE CONTEXT OF AN [HETEROGENEOUS[ 01504 25
              CULTURAL SYSTEM.                                      01504 26
*FILE         CULTURE  INTEGRATED  HETEROGENEOUS                    01504  9
```

```
*OBJECTIVES   TO FAMILIARIZE THE STUDENT WITH SELECTED PHILOSOPHICAL  01505 16
              TERMINOLOGY AND TO RELATE PHILOSOPHY AND EDUCATION.   01505 17
*PREREQUISITE HUMANITIES AND PRACTICE TEACHING.                     01505 18
*EXPERIENCE   DESCRIBE AND DEFINE THE TRADITIONAL AREAS OF PHILOSOPHICAL01505 11
              INVESTIGATION  ≥EPISTEMOLOGY, METAPHYSICS, ETHICS, AND  01505 12
              LOGIC+ AND BRIEFLY DISCUSS THE IMPORT OF EACH TO TEACHERS.01505 13
              CONSIDER SOME OF THE BASIC VIEWS OF EACH OF THESE     01505 14
              BRANCHES.                                             01505 15
*SETTING      SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                  01505 10
*MATERIALS    NONE                                                  01505  5
*LEVEL        ALL GRADES                                            01505  8
*GENERAL      ALL CANDIDATES                                        01505  7
*HOURS        2                                                     01505  6
*EVALUATION   OBSERVATION OF THE DEGREE OF PARTICIPATION IN THE CLASS  01505 19
              DISCUSSION.                                           01505 20
*FILE         CONCEPTS  PHILOSOPHY  EDUCATION                       01505  9
```

```
*OBJECTIVES   TO IDENTIFY SOME OF THE CHARACTERISTIC ROLES OF THE   01506 14
              TEACHER.                                              01506 15
*PREREQUISITE NONE                                                  01506 16
*EXPERIENCE   READ:  GRAMBS, JEAN P, THE ROLES OF THE TEACHER       01506 11
              REPRINTED IN READINGS IN SOCIO-CULTURAL FOUNDATIONS   01506 12
              OF EDUCATION, PP. 434-447+                            01506 13
*SETTING      INDEPENDENT  COLLEGE                                  01506 10
*MATERIALS    REPRINTS OF ARTICLE                                   01506  5
*LEVEL        ALL GRADES                                            01506  8
*GENERAL      ALL CANDIDATES                                        01506  7
*HOURS        1/4                                                   01506  6
*EVALUATION   FORMULATE A LIST OF CHARACTERISTIC TEACHER ROLES AND  01506 17
              ACTIVITIES.                                           01506 18
*FILE         ROLES OF TEACHER  SOCIOLOGY                           01506  9
```

```
*OBJECTIVES   TO IDENTIFY SELECTED VIEWS OF THE ROLE OF THE SCHOOL WITH 01507 16
              REGARD TO THE INDIVIDUAL AND HIS DEVELOPMENT.         01507 17
*PREREQUISITE NONE                                                  01507 18
*EXPERIENCE   VIEW A TAPED PRESENTATION OF SEVERAL WELL KNOWN AND   01507 11
              CLEARLY DEFINED PHILOSOPHIES CONCERNING THE ROLE OF THE  01507 12
              SCHOOL WITH REGARD TO THE INDIVIDUAL AND HIS          01507 13
              DEVELOPMENT.  THIS TAPE WILL BE LOCALLY PREPARED      01507 14
              UTILIZING MEMBERS OF THE STAFF.                       01507 15
*SETTING      SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                  01507 10
*MATERIALS    VIDEO TAPE PLAYER AND PREPARED TAPE.                  01507  5
*LEVEL        ALL GRADES                                            01507  8
*GENERAL      ALL CANDIDATES                                        01507  7
*HOURS        1 1/2                                                 01507  6
*EVALUATION   OBSERVATION OF PARTICIPATION AND QUESTIONING THE GROUP.  01507 19
*FILE         DEVELOPMENT  PHILOSOPHY  SCHOOL OPERATIONS            01507  9
```

```
*OBJECTIVES   TO CLARIFY THE RELATIONSHIP BETWEEN TEACHER ACTIVITIES AND01508 15
              PHILOSOPHICAL BELIEF.                                 01508 16
```

```
*PREREQUISITE MODULE 1506 AND PRACTICE TEACHING.                          01508 17
*EXPERIENCE   FORMULATE A COLLECTIVE LIST DESCRIBING SOME OF THE          01508 11
              CHARACTERISTIC ACTIVITIES OF TEACHERS. AND CATEGORIZE       01508 12
              THEM AS TO THEIR RELEVANCE TO THE TRADITIONAL BRANCHES      01508 13
              OF PHILOSOPHY.                                              01508 14
*SETTING      SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                        01508 10
*MATERIALS    NONE                                                        01508  5
*LEVEL        ALL GRADES                                                  01508  8
*GENERAL      ALL CANDIDATES                                              01508  7
*HOURS        1/2                                                         01508  6
*EVALUATION   OBSERVATION OF THE DEGREE OF PARTICIPATION IN CLASS         01508 18
              ACTIVITY.                                                   01508 19
*FILE         TEACHER ACTIVITIES  PHILOSOPHY                              01508  9
```

```
*OBJECTIVES   TO IDENTIFY THE RELATIONSHIP BETWEEN BASIC PHILOSOPHICAL    01509 16
              BELIEFS AND TEACHER ACTIVITIES.                             01509 17
*PREREQUISITE PREVIOUS MODULE.  1507                                      01509 18
*EXPERIENCE   DISCUSS, FROM CASES PRESENTED BY THE STUDENTS. WAYS IN      01509 11
              WHICH BASIC PHILOSOPHICAL BELIEFS AFFECT DECISION MAKING    01509 12
              IN THE CLASSROOM.  ≥E.G. ONESS BELIEF ABOUT THE ULTIMATE    01509 13
              NATURE OF REALITY WILL DETERMINE HIS BELIEFS CONCERNING     01509 14
              THE MOST DESIRABLE CONTENT OF THE CURRICULUM.               01509 15
*SETTING      SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                        01509 10
*MATERIALS    NONE                                                        01509  5
*LEVEL        ALL GRADES                                                  01509  8
*GENERAL      ALL CANDIDATES                                              01509  7
*HOURS        1                                                           01509  6
*EVALUATION   OBSERVATION OF THE DEGREE OF PARTICIPATION IN CLASS         01509 19
              ACTIVITY.                                                   01509 20
*FILE         BELIEF SYSTEMS  PHILOSOPHY  TEACHER ACTIVITIES              01509  9
```

```
*OBJECTIVES   TO IDENTIFY CURRENT POSITIONS OF THE STUDENTS ON THE        01510 14
              BASIC ISSUES POSED.                                         01510 15
*PREREQUISITE MODULES 1505 - 1509                                         01510 16
*EXPERIENCE   WRITE A BRIEF SUMMARY OF PRESENT FELIEFS REGARDING THE      01510 11
              FOUR LISTED PHILOSOPHICAL AREAS AND GIVE ONE EXAMPLE FOR    01510 12
              EACH AREA HOW BELIEF INFLUENCES BEHAVIOR AS A TEACHER.      01510 13
*SETTING      SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                        01510 10
*MATERIALS    NONE                                                        01510  5
*LEVEL        ALL GRADES                                                  01510  8
*GENERAL      ALL CANDIDATES                                              01510  7
*HOURS        1/2                                                         01510  6
*EVALUATION   READ SUMMARIES TO DETERMINE CURRENT STUDENT BELIEFS.        01510 17
*FILE         TEACHER BEHAVIOR  PHILOSOPHY                                01510  9
```

```
*OBJECTIVES   TO CLARIFY AND EXPAND UPON THE VIEW PRESENTED ON THE        01511 14
              VIDEO-TAPED PRESENTAITON                                    01511 15
*PREREQUISITE PREVIOUS MODULE.                                            01511 16
*EXPERIENCE   DISCUSS THE TAPED PRESENTATION FOCUSING ON THE QUESTION     01511 11
              ≥WHAT TYPE OF INDIVIDUAL SHOULD THE SCHOOL ATTEMPT TO       01511 12
              PRODUCE*≥                                                   01511 13
*SETTING      SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                        01511 10
*MATERIALS    BLANK                                                       01511  5
*LEVEL        ALL GRADES                                                  01511  8
*GENERAL      ALL CANDIDATES                                              01511  7
*HOURS        1                                                           01511  6
*EVALUATION   OBSERVATION OF THE TYPE AND DEGREE OF CLASS DISCUSSION.     01511 17
*FILE         IDEAL STUDENT  PHILOSOPHY  SCHOOL GOALS                     01511  9
```

```
*OBJECTIVES    TO ENCOURAGE THE STUDENT TO CLARIFY AND INVESTIGATE HIS     01512 13
               POSITION ON THE QUESTION.                                   01512 14
*PREREQUISITE  MODULE 1510 AND 1511.                                       01512 15
*EXPERIENCE    WRITE A POSITION PAPER DEFENDING ONE OF THE POSITIONS       01512 11
               PRESENTED ON THE TAPE.                                      01512 12
*SETTING       INDEPENDENT  COLLEGE                                        01512 10
*MATERIALS     NONE                                                        01512  5
*LEVEL         ALL GRADES                                                  01512  8
*GENERAL       ALL CANDIDATES                                              01512  7
*HOURS         1/2                                                         01512  6
*EVALUATION    READ THE POSITION PAPERS FOR CLARITY AND CONSISTENCY        01512 16
               OF ARGUMENT.                                                01512 17
*FILE          WRITING  PHILOSOPHY                                         01512  9
```

```
*OBJECTIVES    TO CLARIFY THE QUESTION OF DISCIPLINE AND EVALUATION        01513 14
               WITH REGARD TO INDIVIDUAL DEVELOPMENT.                      01513 15
*PREREQUISITE  NONE                                                        01513 16
*EXPERIENCE    READ:  NASH, PAUL, AUTHORITY AND FREEDOM IN EDUCATION.      01513 11
               CHAPTER 111, P. 103-133.  THE AUTHORITY OF DISCIPLINE/      01513 12
               THE FREEDOM TO DEVELOP ONESS INTERESTS.                     01513 13
*SETTING       INDEPENDENT  COLLEGE                                        01513 10
*MATERIALS     REPRINTS OF ARTICLE.                                        01513  5
*LEVEL         ALL GRADES                                                  01513  8
*GENERAL       ALL CANDIDATES                                              01513  7
*HOURS         1/2 - 1                                                     01513  6
*EVALUATION    MATERIAL WILL BE DISCUSSED IN FOLLOWING MODULE.             01513 17
*FILE          DISCIPLINE  PHILOSOPHY                                      01513  9
```

```
*OBJECTIVES    TO IDENTIFY RESEARCH FINDINGS RELATING TO THE QUESTION      01514 14
               OF DISCIPLINE AND EVALUATION.                               01514 15
*PREREQUISITE  PREVIOUS MODULE.                                            01514 16
*EXPERIENCE    READ SELECTED ABSTRACTS OF RESEARCH STUDIES DESCRIBING      01514 11
               THE RESULTS OF VARIOUS APPROACHES TO DISCIPLINE AND         01514 12
               EVALUATION.                                                 01514 13
*SETTING       SMALL GROUP 21-12 STUDENTS*  COLLEGE                        01514 10
*MATERIALS     ABSTRACT REPRINTS                                           01514  5
*LEVEL         ALL GRADES                                                  01514  8
*GENERAL       ALL CANDIDATES                                              01514  7
*HOURS         1                                                           01514  6
*EVALUATION    MATERIAL WILL BE DISCUSSED IN FOLLOWING MODULE.             01514 17
*FILE          RESEARCH  PHILOSOPHY  DISCIPLINE                            01514  9
```

```
*OBJECTIVES    TO RELATE BASIC PHILOSOPHICAL BELIEFS TO DECISION MAKING    01515 14
               RELATING TO PRACTICES IN THE AREA OF DISCIPLINE AND         01515 15
               EVALUATION.                                                 01515 16
*PREREQUISITE  MODULES 1513 * 1514                                         01515 17
*EXPERIENCE    DISCUSS THE QUESTION (WHAT TYPE OF INDIVIDUAL SHOULD        01515 11
               THE SCHOOL ATTEMPT TO PRODUCE*(  WHICH OF THE APPROACHES    01515 12
               TO EVALUATION AND DISCIPLINE BEST ACCOMPLISH THIS END*      01515 13
*SETTING       SMALL GROUP 21-12 STUDENTS*  COLLEGE                        01515 10
*MATERIALS     NONE                                                        01515  5
*LEVEL         ALL GRADES                                                  01515  8
*GENERAL       ALL CANDIDATES                                              01515  7
*HOURS         BLANK                                                       01515  6
*EVALUATION    OBSERVATION OF THE DEGREE AND QUALITY OF PARTICIPATION.     01515 18
*FILE          EVALUATION  PHILOSOPHY  DISCIPLINE                          01515  9
```

```
*OBJECTIVES    TO INTRODUCE THE QUESTION OF EQUAL OPPORTUNITIES AND       01516 17
               INDIVIDUAL DEVELOPMENT.                                     01516 18
*PREREQUISITE  NONE.                                                       01516 19
*EXPERIENCE    READ:  NASH, PAUL, AUTHORITY AND FREEDOM IN EDUCATION,      01516 11
               CHAPTER V [THE AUTHORITY OF EXCELLENCE/ THE FREEDOM TO      01516 12
               ENJOY EQUAL OPPORTUNITIES[, PP. 167-206.  GEIZI, KALIL I.   01516 13
               AND MEYERS, JAMES E., TEACHING IN AMERICAN CULTURE,        01516 14
               [SCHOOL DESEGREGATION[, A SELECTION BY THOMAS F.            01516 15
               PETTIGREW, PP. 285-295.                                     01516 16
*SETTING       INDEPENDENT  COLLEGE                                        01516 10
*MATERIALS     REPRINTS OF ARTICLES                                        01516  5
*LEVEL         ALL GRADES                                                  01516  8
*GENERAL       ALL CANDIDATES                                              01516  7
*HOURS         1 - 2                                                       01516  6
*EVALUATION    MATERIAL WILL BE DISCUSSED IN SUBSEQUENT MODULES.           01516 20
*FILE          EQUALITY  PHILOSOPHY  DEVELOPMENT                           01516  9
```

```
*OBJECTIVES    TO PRESENT DIVERGENT VIEWS ON THE QUESTION OF EQUAL        01517 18
               OPPORTUNITIES BEFORE THE CLASS.                             01517 19
*PREREQUISITE  PREVIOUS MODULE.                                            01517 20
*EXPERIENCE    OBSERVE A PANEL DISCUSSION CONDUCTED BY MEMBERS OF THE      01517 11
               LOCAL COMMUNITY.  THE PANEL SHOULD CONSIST OF LOCAL         01517 12
               TEACHER2S+, A COUNSELOR AND REPRESENTATIVES OF VARIOUS      01517 13
               GROUPS IN THE COMMUNITY.  THE DISCUSSION SHOULD FOCUS       01517 14
               ON THE QUESTION OF EQUAL OPPORTUNITIES AND EDUCATION AND    01517 15
               SHOULD CONSIDER BOTH ABILITY GROUPING AND RACIAL            01517 16
               SEGREGATION.                                                01517 17
*SETTING       SMALL GROUP 21-12 STUDENTS+  COMMUNITY                      01517 10
*MATERIALS     BLANK                                                       01517  5
*LEVEL         ALL GRADES                                                  01517  8
*GENERAL       ALL CANDIDATES                                              01517  7
*HOURS         1 - 2                                                       01517  6
*EVALUATION    READING AND PANEL DISCUSSION WILL BE DISCUSSED.             01517 21
*FILE          LOCAL COMMUNITY  PHILOSOPHY  EQUALITY                       01517  9
```

```
*OBJECTIVES    TO CLARIFY THE QUESTION OF EQUAL OPPORTUNITIES IN           01518 15
               DISCUSSION AND TO RELATE THAT QUESTION TO PREVIOUSLY        01518 16
               DISCUSSED BELIEFS.                                          01518 17
*PREREQUISITE  PREVIOUS MODULES.                                           01518 18
*EXPERIENCE    QUESTION PANEL MEMBERS AND DISCUSS, IN CLASS, THE           01518 11
               QUESTIONS POSED DURING THE PANEL2S PRESENTATION.  ATTEMPT   01518 12
               TO DEFINE [EQUAL OPPORTUNITY[ CONSISTENTLY WITH BASIC       01518 13
               BELIEFS.  SOLUTIONS*                                        01518 14
*SETTING       SMALL GROUP 21-12 STUDENTS+  COMMUNITY                      01518 10
*MATERIALS     BLANK                                                       01518  5
*LEVEL         ALL GRADES                                                  01518  8
*GENERAL       ALL CANDIDATES                                              01518  8
*HOURS         1                                                           01518  6
*EVALUATION    OBSERVATION OF THE DEGREE OF PARTICIPATION.                 01518 19
*FILE          EQUALITY  PHILOSOPHY  BELIEF SYSTEM                         01518  9
```

```
*OBJECTIVES    TO INTRODUCE THE QUESTION OF INSTITUTIONAL AUTHORITY IN     01519 15
               THE AMERICAN EDUCATIONAL SYSTEM.                            01519 16
*PREREQUISITE  NONE                                                        01519 17
*EXPERIENCE    READ:  GEZI, KALIL I. AND MEYERS, JAMES E., TEACHING IN     01519 11
               AMERICAN CULTURE, [SEARCH FOR FREEDOM:  THE STORY OF        01519 12
               AMERICAN EDUCATIONI, A SELECTION BY R. FREEMAN BUTTS,      01519 13
               PP. 4-34.                                                  01519 14
*SETTING       INDEPENDENT  COLLEGE                                       01519 10
*MATERIALS     REPRINTS OF ARTICLE                                        01519  5
*LEVEL         ALL GRADES                                                 01519  8
*GENERAL       ALL CANDIDATES                                             01519  7
*HOURS         1/2 - 1                                                    01519  6
*EVALUATION    MATERIAL WILL BE DISCUSSED IN SUBSEQUENT MODULES.          01519 18
*FILE          AUTHORITY  PHILOSOPHY  HIERARCHY                           01519  9

*OBJECTIVES    TO IDENTIFY AND PRESENT VARIOUS VIEWS ON THE QUESTION      01520 14
               OF THE SOURCE AND NATURE OF EDUCATIONAL AUTHORITY.         01520 15
*PREREQUISITE PREVIOUS MODULE.                                            01520 16
*EXPERIENCE    LISTEN TO A TAPED PRESENTATION OF VARIOUS VIEWS            01520 11
               CONCERNING THE SOURCE AND NATURE OF EDUCATIONAL            01520 12
               AUTHORITY.                                                 01520 13
*SETTING       SMALL GROUP 21-12 STUDENTS+  COLLEGE                       01520 10
*MATERIALS     BLANK                                                      01520  5
*LEVEL         ALL GRADES                                                 01520  8
*GENERAL       ALL CANDIDATES                                             01520  7
*HOURS         1/2 - 1                                                    01520  6
*EVALUATION    READING AND TAPE WILL BE DISCUSSED IN SUBSEQUENT MODULE.   01520 17
*FILE          AUTHORITY  PHILOSOPHY  POWER                               01520  9

*OBJECTIVES    TO CLARIFY THE QUESTION OF AUTHORITY IN EDUCATION AND TO   01521 14
               RELATE THAT QUESTION TO BASIC BELIEFS.                     01521 15
*PREREQUISITE PREVIOUS MODULES.                                           01521 16
*EXPERIENCE    DISCUSS THE QUESTION OF EDUCATIONAL AUTHORITY INCLUDING    01521 11
               THE ACTUAL SOURCES OF SUCH AUTHORITY AND THE DESIRABILITY  01521 12
               OF VARIOUS ALTERNATIVES.                                   01521 13
*SETTING       SMALL GROUP 21-12 STUDENTS+  COLLEGE                       01521 10
*MATERIALS     NONE                                                       01521  5
*LEVEL         ALL GRADES                                                 01521  8
*GENERAL       ALL CANDIDATES                                             01521  7
*HOURS         1 - 1 1/2                                                  01521  6
*EVALUATION    OBSERVATION OF THE DEGREE OF PARTICIPATION.                01521 17
*FILE          AUTHORITY  PHILOSOPHY  POWER                               01521  9

*OBJECTIVES    TO INTRODUCE THE TOPIC OF NON - PUBLIC EDUCATION.          01522 14
*PREREQUISITE NONE                                                        01522 15
*EXPERIENCE    READ:  GEZI, KALIL I. AND MEYERS, JAMES E., TEACHING IN    01522 11
               AMERICAN CULTURE  [RELIGION AND THE SCHOOLSI, A            01522 12
               SELECTION BY CULBERTSON, PP. 273-284.                      01522 13
*SETTING       INDEPENDENT  COLLEGE                                       01522 10
*MATERIALS     REPRINTS OF THE ABOVE                                      01522  5
*LEVEL         ALL GRADES                                                 01522  8
*GENERAL       ALL CANDIDATES                                             01522  7
*HOURS         1/4 - 1/2                                                  01522  6
*EVALUATION    MATERIAL WILL BE DISCUSSED IN SUBSEQUENT LECTURES.         01522 16
*FILE          NON - PUBLIC EDUCATION  PHILOSOPHY                         01522  9
```

```
*OBJECTIVES    TO POINT OUT THAT ANY SUBJECT CAN BE TAUGHT EFFECTIVELY   01637 21
               AND IN SOME INTELLECTUALLY HONEST FORM TO ANY CHILD AT ANY01637 22
               STAGE OF DEVELOPMENT.                                      01637 23
*PREREQUISITE READINGS REGARDING IMPACT OF SIGNIFICANT OTHERS AND SELF   01637 24
               CONCEPTION.                                                01637 25
*EXPERIENCE    LECTURE PRESENTATION ON W.B. BROOKOVERSS FOUR BASIC        01637 11
               POSTULATES 1. PERSONS GENERALLY LEARN TO BEHAVE IN WAYS    01637 12
               THAT EACH CONSIDER APPROPRIATE TO HIMSELF.                 01637 13
2. APPROPRIATENESS OF BEHAVIOR IS DEFINED BY EACH PERSON THROUGH THE      01637 14
               INTERNALIZATION OF THE EXPECTATIONS OF SIGNIFICANT OTHERS.01637 15
               3. THE FUNCTIONAL LIMITS OF A PERSONSS ABILITY TO LEARN    01637 16
               ARE DETERMINED BY HIS SELF-CONCEPTION OF HIS ABILITIES AS 01637 17
               ACQUIRED IN SOCIAL INTERACTION.  4. A PERSON LEARNS WHAT   01637 18
               HE BELIEVES SIGNIFICANT OTHERS EXPECT HIM TO LEARN IN THE 01637 19
               CLASSROOM OR IN ANY OTHER SITUATION.                       01637 20
*SETTING       LARGE GROUP  COLLEGE                                       01637 10
*MATERIALS     BLANK                                                      01637  5
*LEVEL         ALL GRADES                                                 01637  8
*GENERAL       ALL CANDIDATES                                             01637  7
*HOURS         1                                                          01637  6
*EVALUATION    FOLLOW UP MODULES ON ABILITY TO LEARN OR SELF CONCEPTION   01637 26
*FILE          ABILITY TO LEARN  OR SELF-CONCEPTION                       01637  9
```

```
*OBJECTIVES    TO DRAMATICALLY SHOW THE TEACHER CANDIDATES HOW IT FEELS   01638 22
               TO BE GROUPED AND WHAT TEACHER EXPECTATIONS CAN DO TO      01638 23
               THEIR MORALE.                                              01638 24
*PREREQUISITE PREVIOUS MODULE 1637 ON ABILITY TO LEARN OR SELF           01638 25
               CONCEPTION.                                                01638 26
*EXPERIENCE    THE INSTRUCTOR SHOULD HAVE THE TEACHER CANDIDATES DIVIDE   01638 11
               THEMSELVES INTO THREE GROUPS.  SUPERIOR, AVERAGE AND BELOW01638 12
               AVERAGE.  THE SUPERIOR GROUP IS SOLELY RESPONSIBLE FOR     01638 13
               THEIR WORK ETC.  THEY MAY OR MAY NOT ATTEND CLASS.  THIS   01638 14
               IDEA OF CLASS ATTENDANCE IS UP TO THEM.  THIS IN TURN WILL01638 15
               FREE THE INSTRUCTOR TO SPEND MORE TIME WITH THE AVERAGE    01638 16
               AND BELOW AVERAGE STUDENTS.  THE INSTRUCTOR SHOULD HAVE    01638 17
               THE STUDENTS PLACE THEMSELVES IN WHATEVER GROUP THEY FEEL 01638 18
               THEY BELONG.  THE BELOW AVERAGE GROUP SHOULD HAVE ABOUT    01638 19
               70% OF THE INSTRUCTORS TIME AND THEY SHOULD BE FREED OF    01638 20
               WRITING TERM PAPERS ETC.                                   01638 21
*SETTING       LARGE GROUP  COLLEGE                                       01638 10
*MATERIALS     ASSIGN READING: MOTIVATION IN TEACHING AND LEARNING.       01638  5
               DON E. HAMACHEK, N.E.A., 1968                              01638
*LEVEL         ALL GRADES                                                 01638  8
*GENERAL       ALL CANDIDATES                                             01638  7
*HOURS         1                                                          01638  6
*EVALUATION    FOLLOW UP MODULE 1629 ON STUDENTSS ABILITY TO LEARN OR     01638 27
               SELF CONCEPTION.                                           01638 28
*FILE          ABILITY TO LEARN NOR  SELF CONCEPTION                      01638  9
```

```
*OBJECTIVES     TO DRAMATICALLY SHOW THE TEACHERS HOW IT FEELS TO BE       01639 14
                GROUPED AND WHAT TEACHER EXPECTATIONS CAN DO TO THEIR      01639 15
                MORALE.                                                    01639 16
*PREREQUISITE PREVIOUS MODULE 1638  ON ABILITY TO LEARN OR SELF            01639 17
                CONCEPTION.                                                01639 18
*EXPERIENCE     DISCUSSION OF WHAT HAPPENED DURING MODULE 1638 ON ABILITY  01639 11
                TO LEARN OR SELF CONCEPTION.  WHY DID STUDENTS RESENT      01639 12
                GROUPING AND CATEGORIZING^                                 01639 13
*SETTING        SMALL GROUP 21-12 STUDENTS,  COLLEGE                       01639 10
*MATERIALS      BLANK                                                      01639  5
*LEVEL          ALL GRADES                                                 01639  8
*GENERAL        ALL CANDIDATES                                             01639  7
*HOURS          1                                                          01639  6
*EVALUATION     IF MATERIAL AND EXPERIENCES BECOME SIGNIFICANT TO THE      01639 19
                LEARNER.                                                   01639 20
*FILE           ABILITY TO LEARN OR  SELF CONCEPTION                       01639  9
```

```
*OBJECTIVES     TO INFORM TEACHER CANDIDATES THE IMPORTANCE OF TEACHER     01640 16
                EXPECTATIONS AND WHAT IT DOES TO THE LEARNER               01640 17
                                                                           01640 18
*PREREQUISITE NONE
*EXPERIENCE     READING:  MOTIVATION IN TEACHING AND LEARNING.             01640 11
                DON E. HAMACHEK, NATIONAL EDUCATION ASSOCIATION, 1968.     01640 12
                SPECIAL NOTE SHOULD BE TAKEN OF ROSENTHAL$S STUDY P.6.     01640 13
                DISCUSSION OF THE IMPLICATIONS OF ROSENTHAL$S STUDY, I.E.,01640 14
                SIGNIFICANT OTHERS AND TEACHER EXPECTATIONS.               01640 15
                                                                           01640 10
*SETTING        INDEPENDENT  COLLEGE                                       01640  5
*MATERIALS      WHAT RESEARCH SAYS TO THE TEACHER, NO. 34, MOTIVATION IN   01640
                TEACHING AND LEARNING, DON E. HAMACHEK
                                                                           01640  8
*LEVEL          ALL GRADES                                                 01640  7
*GENERAL        ALL CANDIDATES                                             01640  6
*HOURS          1
*EVALUATION     DISCUSSION OF IMPLICATIONS OF READING                      01640 19
*FILE           LEARNING  SIGNIFICANT OTHERS  EXPECTATIONS                 01640  9
```

```
*OBJECTIVES     TO POINT OUT THAT THERE IS NO SINGLE BEST OR WORST KIND OF01641 21
                TEACHER BUT THAT THERE ARE CLEARLY DISTINGUISHABLE         01641 22
                CHARACTERISTICS ASSOCIATED WITH [GOOD[ AND [BAD[ TEACHERS 01641 23
                                                                           01641 24
*PREREQUISITE READING BEFORE DISCUSSION
*EXPERIENCE     READ: [WHAT RESEARCH TELLS US ABOUT THE CHARACTERISTICS OF01641 11
                GOOD AND BAD TEACHERS, DON E. HAMACHEK,[ HUMAN DYNAMICS IN01641 12
                PSYCHOLOGY AND EDUCATION, EDITED BY DON E, HAMACHEK, ALLYN01641 13
                AND BACON, INC., 1968, P.P.187-203.  DISCUSS: 1. WHAT DOES01641 14
                RESEARCH SAY ABOUT GOOD AND BAD TEACHERS^ 2. WHAT ARE YOUR01641 15
                IDEAS ABOUT GOOD AND BAD TEACHERS^ 3. IS THERE ANY SINGLE 01641 16
                BEST OR WORST KIND OF TEACHER^ 4. WHAT ARE THE CLEARLY     01641 17
                DISTINGUISHABLE CHARACTERISTICS ASSOCIATED WITH GOOD AND   01641 18
                BAD TEACHERS^ 5. SHOULD A TEACHER BE CONCERNED WITH        01641 19
                STUDENT FEELING OR MERELY WITH STUDENT ACHIEVEMENT.        01641 20
                                                                           01641 10
*SETTING        INDEPENDENT  COLLEGE                                       01641  5
*MATERIALS      BLANK                                                      01641  8
*LEVEL          ALL GRADES                                                 01641  7
*GENERAL        ALL CANDIDATES                                             01641  6
*HOURS          2
*EVALUATION     HAVE STUDENTS PICK OUT SEVERAL [GOOD[ AND SEVERAL [BAD[    01641 25
                TEACHERS FROM AMONG THEIR COLLEGUES AND JUSTIFY THEIR      01641 26
                CHOICES AND COMPARE THESE TO ARTICLE READ.                 01641 27
*FILE           TEACHERS  RESEARCH  EFFECTIVENESS                          01641  9
```

```
*OBJECTIVES    TO SHOW STUDENT THE AFFECTS OF GROUP CENTERED CLASSES,     01642 22
               ANXIETY AND SO FURTH UPON THE LEARNER AND TO POINT OUT     01642 23
               THAT THERE IS NO ONE METHOD FOR ALL KIDS,                  01642 24
*PREREQUISITE  BLANK                                                      01642 25
               READ: [STUDENTS, GROUPS, AND TEACHING METHODS.[            01642 11
               WILBER MC KEACHIE, HUMAN DYNAMICS IN PSYCHOLOGY AND        01642 12
               EDUCATION, EDITED BY DON E. HAMACHEK, ALLYN AND BACON,     01642 13
               INC., 1968, PP. 207-215.  DISCUSS: 1. WHAT KIND OF STUDENT01642 14
               IS MOST LIKELY TO SUCCEED IN [GROUP-CENTERED[ CLASSES^     01642 15
               2. HOW IS ANXIETY RELATED TO HOW A STUDENT ACHIEVES IN A   01642 16
               COURSE^ 3. IF YOU REDUCE ANXIETY, DOES THIS INSURE HIGHER  01642 17
               PERFORMANCE^ 4. IS IT POSSIBLE TO MOTIVATE STUDENTS TOO    01642 18
               MUCH^ 5. HOW WOULD YOU DESCRIBE YOUR OWN MOTIVATIONAL      01642 19
               LEVEL AND ANXIETY^ 6. HOW ARE THESE RELATED TO YOUR OWN    01642 20
               PERFORMANCE AS A STUDENT^                                  01642 21
*SETTING       INDEPENDENT                                                01642 10
*MATERIALS     BLANK                                                      01642  5
*LEVEL         ALL GRADES                                                 01642  8
*GENERAL       ALL CANDIDATES                                             01642  7
*HOURS         2                                                          01642  6
*EVALUATION    BE ABLE TO IDENTIFY 6 AFFECTS OF GROUPING ON STUDENTS.     01642 26
               IDENTIFY AT LEAST 10 DIFFERENT KINDS OF GROUPING + EXPLAIN01642 27
               TEN CHARACTERISTICS OF EACH GROUP.                         01642 28
*FILE          TEACHING  METHODS  GROUPING                                01642  9
```

```
*OBJECTIVES    TO SPOT POTENTIAL DROPOUTS IN YOUR CLASSROOM AND FIND SOME01643 22
               SOLUTION.                                                  01643 23
*PREREQUISITE  READINGS ON DROPOUTS:                                      01643 24
*EXPERIENCE    SPOTTING POTENTIAL DROPOUTS THE FOLLOWING QUESTIONS SHOULD01643 11
               BE ANSWERED FROM THE AVAILABLE RESEARCH: [WHO DROPS OUT OF01643 12
               SCHOOL^[ [WHY DO THEY DROP OUT^[ [HOW CAN YOU IDENTIFY THE01643 13
               DROPOUT^[ WHAT CAN BE DONE TO KEEP THEM IN SCHOOL LONG     01643 14
               ENOUGH TO REALIZE THEIR EDUCATIONAL POTENTIAL^[ [DOES      01643 15
               READING ABILITY HAVE ANYTHING TO DO WITH DROPPING OUT^[    01643 16
               [WHAT ABOUT REJECTION IN AREAS OF SCHOOL EXPERIENCE^[      01643 17
               USING THE ABOVE INFORMATION AND RESEARCHING YOUR CLASS SEE01643 18
               IF YOU CAN IDENTIFY THE POTENTIAL DROP OUTS IN YOUR CLASS 01643 19
               AND PRESENT A WRITTEN PLAN TO COUNTERACT THE STUDENTS      01643 20
               DROPPING OUT OF SCHOOL.                                    01643 21
*SETTING       LARGE GROUP  COLLEGE                                       01643 10
*MATERIALS     BLANK                                                      01643  5
*LEVEL         ALL GRADES                                                 01643  8
*GENERAL       ALL CANDIDATES                                             01643  7
*HOURS         1                                                          01643  6
*EVALUATION    STUDENTSS IDENTIFICATION OF POTENTIAL DROPOUTS.            01643 25
*FILE          POTENTIAL DROPOUTS                                         01643  9
```

```
*OBJECTIVES    TO GIVE THE STUDENT EXPERIENCE IN DEALING WITH PROBLEM     01644 14
               STUDENTS IN A CONSTRUCTIVE WAY.                            01644 15
*PREREQUISITE  READINGS ON DROPOUTS                                       01644 16
*EXPERIENCE    CONSTRUCT A PLAN OF ACTION TO DEAL WITH THE INDIVIDUAL     01644 11
               NEEDS OF THE POTENTIAL DROPOUTS IDENTIFIED IN 1643 ON      01644 12
               POTENTIAL DROPOUTS.                                        01644 13
*SETTING       INDEPENDENT  COLLEGE                                       01644 10
*MATERIALS     BLANK                                                      01644  5
*LEVEL         ALL GRADES                                                 01644  8
*GENERAL       ALL CANDIDATES                                             01644  7
```

```
                                                                          01644  6
*HOURS          3                                                         01644 17
*EVALUATION     CRITICAL EVALUATION OF PLAN.                              01644  9
*FILE           POTENTIAL DROPOUTS  PLANNING
```

```
*OBJECTIVES     TO SHOW THAT GROUPING ON THE BASIS OF STANDARDIZED TEST   01645 14
                TENDS TO SEGREGATE NOT ALONE ON THE BASIS OF SCHOLASTIC A
                TENDS TO SEGREGATE NOT ALONE ON THE BASIS OF SCHOLASTIC   01645 15
                ABILITY BUT ON RACIAL, ETHNIC, AND SOCIOECONOMIC LINES.   01645 16
                                                                          01645 17
*PREREQUISITE   NONE
*EXPERIENCE     READING BETTELHEIM, BRUNO ≥1958†, SEGREGATION: NEW STYLE. 01645 11
                SCH R 66: 251•272.  EASH, MAURICE J. ≥1961†, GROUPING: WHA01645 12
                WHAT HAVE WE LEARNED^ ED LEADERSHIP, 18:429-34            01645 13
                                                                          01645 10
*SETTING        INDEPENDENT  COLLEGE                                      01645  5
*MATERIALS      SCH R 66: 251•272 ED LEADERSHIP 18: 429-34                01645  8
*LEVEL          ALL GRADES                                                01645  7
*GENERAL        ALL CANDIDATES                                            01645  6
*HOURS          1                                                         01645 18
*EVALUATION     DISCUSSION SHOULD BRING OUT THAT GROUPING PRACTICES       01645 19
                MAINTAIN AND ACCENTUATE SOCIAL AND RACIAL BIASES WHICH    01645 20
                MILITATE AGAINST THE GENERAL EDUCATIONAL OBJECTIVES, EQUAL01645 21
                EDUCATIONAL OPPORTUNITY AND THE DEVELOPMENT OF EACH PERSON01645 22
                AS AN INDIVIDUAL.                                         01645  9
*FILE           SCHOLASTIC  ABILITY  SEGREGATION
```

```
*OBJECTIVES     TO STIMULATE THOUGHT AND CREATIVE DISCUSSION REGARDING    01646 24
                TEACHERS≤ ORGANIZATIONS.                                  01646 25
                                                                          01646 26
*PREREQUISITE   NONE
*EXPERIENCE     HAVE STUDENTS DISCUSS FOLLOWING QUESTIONS: 1. THERE SHOULD01646 11
                BE A MERGER OF THE NEA AND AFT ON THE BASIS OF            01646 12
                A† ABANDONMENT OF AFFILIATION WITH THE LABOR MOVEMENT AND 01646 13
                B† ADEQUATE ORGANIZATIONAL SAFEGUARDS TO PREVENT          01646 14
                ADMINISTRATOR DOMINATION OF THE MERGED ORGANIZATION.      01646 15
                2. TEACHERS≤ ORGANIZATIONS SHOULD ESTABLISH AND ENFORCE   01646 16
                A CODE OF PROFESSIONAL ETHICS THAT WOULD BE NATIONWIDE IN 01646 17
                SCOPE.  3. SUPERINTENDENTS AND OTHER TOP LEVEL MANAGERIAL 01646 18
                EMPLOYEES SHOULD NOT BE ALLOWED TO JOIN ORGANIZATIONS     01646 19
                WHICH REPRESENT TEACHERS IN MATTERS OF EMPLOYMENT.        01646 20
                4. STRATEGY SHOULD BE BASED UPON THE PREMISE THAT EMPLOYEE01646 21
                BENEFITS ARE ORDINARILY NOT GIVEN FREELY BY EMPLOYERS.    01646 22
                THEY ARE TAKEN BY EMPLOYEES.                              01646 23
                                                                          01646 10
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                      01646  5
*MATERIALS      BLANK                                                     01646  8
*LEVEL          ALL GRADES                                                01646  7
*GENERAL        ALL CANDIDATES                                            01646  6
*HOURS          1                                                         01646 27
*EVALUATION     FINAL MODULE ON TEACHERS≤ ORGANIZATIONS                   01646  9
*FILE           TEACHERS≤ ORGANIZATIONS
```

```
*OBJECTIVES     TO ACQUAINT STUDENTS WITH TEACHERS ORGANIZATIONS          01647 12
                                                                          01647 13
*PREREQUISITE   NONE                                                      01647 11
*EXPERIENCE     PRESENTATION BY: NEA REPRESENTATIVE AFT REPRESENTATIVE    01647 10
*SETTING        LARGE GROUP COLLEGE                                       01647  5
*MATERIALS      BLANK                                                     01647  8
*LEVEL          ALL GRADES                                                01647  7
*GENERAL        ALL CANDIDATES                                            01647  6
*HOURS          2                                                         01647 14
*EVALUATION     FINAL MODULE ON TEACHERS ORGANIZATIONS                    01647  9
*FILE           TEACHERS ORGANIZATIONS
```

```
*OBJECTIVES    TO FOSTER THE SPIRIT OF CREATIVITY AND INITIATIVE TOWARD  01648 16
               RESOLVING OLD PROBLEMS.                                   01648 17
*PREREQUISITE  MODULES 1646 + 1647 REGARDING TEACHERS$ ORGANIZATIONS.    01648 18
*EXPERIENCE    HAVE STUDENTS PREPARE A MODEL TEACHER ORGANIZATION        01648 11
               *A PROFESSIONAL ORGANIZATION THAT ALL TEACHERS WOULD HAVE 01648 12
               TO BELONG TO AND WHICH WOULD HAVE SOME CONTROL OVER       01648 13
               TEACHER CERTIFICATION AND COMPLETE CONTROL OVER TEACHER   01648 14
               COMPETENCY.*                                              01648 15
*SETTING       INDEPENDENT COLLEGE                                       01648 10
*MATERIALS     BLANK                                                     01648  5
*LEVEL         ALL GRADES                                                01648  8
*GENERAL       ALL CANDIDATES                                            01648  7
*HOURS         2                                                         01648  6
*EVALUATION    CRITICAL EVALUATION OF STUDENTS$ MODEL                    01648 19
*FILE          TEACHERS ORGANIZATIONS                                    01648  9
```

```
*OBJECTIVES    TO ACQUAINT STUDENTS WITH ACTION PROGRAMS BEING CARRIED ON01649 16
               IN EDUCATION.                                             01649 17
*PREREQUISITE  NONE                                                      01649 18
*EXPERIENCE    HAVE STUDENTS VISIT SCHOOLS INVOLVED IN FEDERAL PROGRAMS  01649 11
               SPONSORED BY THE DEPARTMENT OF HEALTH EDUCATION AND       01649 12
               WELFARE, TITLES I, II, III, IV ETC OF THE ELEMENTARY AND  01649 13
               SECONDARY EDUCATION ACT OF 1965 AND REPORT TO CLASS THEIR 01649 14
               FINDINGS.                                                 01649 15
*SETTING       INDEPENDENT SCHOOL                                        01649 10
*MATERIALS     BLANK                                                     01649  5
*LEVEL         ALL GRADES                                                01649  8
*GENERAL       ALL CANDIDATES                                            01649  7
*HOURS         3                                                         01649  6
*EVALUATION    FINAL MODULE ON FEDERAL ORGANIZATIONS 1652                01649 19
*FILE          FEDERAL ORGANIZATIONS                                     01649  9
```

```
*OBJECTIVE     TO ACQUAINT STUDENTS WITH FEDERAL PROGRAMS AND MONIES     01650 16
               AVAILABLE TO LOCAL SCHOOL DISTRICTS.                      01650 17
*PREREQUISITE  MODULE 1 ON FEDERAL ORGANIZATIONS                         01650 18
*EXPERIENCE    BRING IN A STATE COORDINATOR OF FEDERAL PROGRAMS SPONSORED01650 11
               BY TITLES I, II, III, IV ETC OF THE ELEMENTARY AND        01650 12
               SECONDARY SCHOOL ACT OF 1965.  HAVE HIM EXPLAIN THE       01650 13
               DIFFERENT TITLES AND HOW THEY CAN BE USED TO BEST         01650 14
               ADVANTAGE TO MEET LOCAL EDUCATIONAL NEEDS.                01650 15
*SETTING       LARGE GROUP COLLEGE                                       01650 10
*MATERIALS     BLANK                                                     01650  5
*LEVEL         ALL GRADES                                                01650  8
*GENERAL       ALL CANDIDATES                                            01650  7
*HOURS         1                                                         01650  6
*EVALUATION    FINAL MODULE ON FEDERAL ORGANIZATIONS 1652                01650 19
*FILE          FEDERAL ORGANIZATIONS                                     01650  9
```

```
*OBJECTIVES    TO ACQUAINT STUDENTS WITH THE WRITING AND SUBMISSION OF   01651 13
               FEDERAL PROPOSALS.                                        01651 14
*PREREQUISITE  MODULE 1650 + 1649 ON FEDERAL ORGANIZATIONS               01651 15
*EXPERIENCE    HAVE A FEDERAL OR STATE EXPERT SHOW STUDENTS HOW TO WRITE 01651 11
               AND SUBMIT PROPOSALS FOR FEDERALLY FINANCED PROGRAMS.     01651 12
*SETTING       LARGE GROUP COLLEGE                                       01651 10
*MATERIALS     BLANK                                                     01651  5
*LEVEL         ALL GRADES                                                01651  8
```

```
*GENERAL        ALL CANDIDATES                                            01651  7
*HOURS          1                                                         01651  6
*EVALUATION     MODULE 1652                                               01651 16
*FILE           FEDERAL ORGANIZATIONS                                     01651  9
```

```
*OBJECTIVES     TO GIVE STUDENTS EXPERIENCE IN EDUCATIONAL INNOVATION.    01652 13
*PREREQUISITE   MODULES 1648,49,50+51 ON FEDERAL ORGANIZATIONS            01652 14
*EXPERIENCE     HAVE CLASS SUBMIT A MODEL PROPOSAL TO MEET A LOCAL        01652 11
                EDUCATIONAL NEED.                                         01652 12
                                                                          01652 10
*SETTING        SMALL GROUP ≥1-12STJUDENTS+ COLLEGE                       01652  5
*MATERIALS      BLANK                                                     01652  8
*LEVEL          ALL GRADES                                                01652  7
*GENERAL        ALL CANDIDATES                                            01652  6
*HOURS          5                                                         01652 15
*EVALUATION     CRITICAL EVALUATION OF MODEL PROPOSAL.                    01652  9
*FILE           FEDERAL ORGANIZATIONS
```

```
*OBJECTIVES     TO GAIN AN INSIGHT INTO GROUPS EFFECT UPON SELF CONCEPT.  01653 13
                                                                          01653 14
*PREREQUISITE   NONE                                                      01653 11
*EXPERIENCE     READ:  COLE S, BRAMBECK, SOCIAL FOUNDATIONS OF EDUCATION  01653 12
                JOHN WILEY AND SONS INC, N.Y., 1966, PP. 75-79.           01653 10
*SETTING        INDEPENDENT COLLEGE                                       01653  5
*MATERIALS      BLANK                                                     01653  8
*LEVEL          ALL GRADES                                                01653  7
*GENERAL        ALL CANDIDATES                                            01653  6
*HOURS          102                                                       01653 15
*EVALUATION     BE ABLE TO IDENTIFY 8 EFFECTS-OUT OF A LIST OF 20 WHICH   01653 16
                ARE CRUCIAL EFFECTS OF GROUPS ON THE SELF CONCEPT.        01653  9
*FILE           SELF CONCEPTION
```

```
*OBJECTIVES     TO MEANINGFULLY ACQUAINT STUDENTS TO SOCIOMETRIC TESTS    01654 17
                TEST AS A MEANS OF ANALYIZING GROUP STRUCTURE             01654 18
*PREREQUISITE   PREVIOUS CONTACT WITH GROUP.  GROUP INVOLVED SHOULD HAVE  01654 19
                RECENTLY WORKED TOGETHER IN OTHER EXPERIENCES             01654 20
*EXPERIENCE     TO EXPERIENCE SOCIOMETRIC TESTING AS THE SUBJECT:  THE    01654 11
                INSTRUCTOR ADMINISTERS A SOCIOMETRIC TEST OT THE COLLEGE  01654 12
                CLASS, THE STUDENT PARTICIPATES BY RESPONDING TO THE      01654 13
                QUESTIONS.  QUESTIONS SHOULD BE ON PREPARED QUESTIONNAIRE.01654 14
                DISCUSS STUDENTS FEELINGS ABOUT TAKING A SOCIOMETRIC      01654 15
                QUESTIONNAIRE.                                            01654 16
*SETTING        OTHER ≥SPECIFY+ 20-30 STUDENTS COLLEGE                    01654 10
*MATERIALS      BLANK                                                     01654  5
*LEVEL          GRADES 1-4  GRADES 5-8                                    01654  8
*GENERAL        ALL CANDIDATES                                            01654  7
*HOURS          102                                                       01654  6
*EVALUATION     DISCUSS HOW STUDENTS FELT ABOUT PARTICIPATING IN THIS     01654 21
                ACTIVITY.  TO THE EXTENT THAT EACH STUDENT REACTS,        01654 22
                POSITIVELY OR NEGATIVELY, THE EXPERIENCE HAS SUCCESSFULLY 01654 23
                INTRODUCED THE TECHNIQUE.                                 01654 24
*FILE           SOCIOMETRICS  ACCEPTANCE  GROUP STRUCTURE                 01654  9
```

```
*OBJECTIVES     INTRODUCE STUDENTS TO METHODS OF ADMINISTRING, ANALYISING,01655 17
                + UTILIZING SOCIOMETRIC TESTS.                            01655 18
                                                                          01655 19
*PREREQUISITE   1654                                                      01655 11
*EXPERIENCE     READ TEXT MATERIAL REGARDING VARIOUS METHODS, OF          01655 12
                ADMINISTRING AND APPLYING SOCIOMETRIC TESTS.  ≥IE PP.     01655 13
                341-346 SOCIAL PERSPECTIVES ON EDUCATION, DOROTHY WESTBY-
```

```
               GIBSON, JOHN WILEY + SONS INC., N.Y., 1965.+  DISCUSS:    01655 14
               USES OF VARIOUS METHOD TO EXAMINE GROUPS SUB-GROUPS AND   01655 15
               INDIVIDUALS+  WHAT DOES ASOCIOGRAM REALLY TELL.           01655 16
*SETTING       INDEPENDENT  SMALL GROUP ≥1-12 STUDENTS+ COLLEGE          01655 10
*MATERIALS     BLANK                                                     01655  5
*LEVEL         GRADES 1-4  GRADES 5-8                                    01655  8
*GENERAL       ALL CANDIDATES                                            01655  7
*HOURS         1                                                         01655  6
*EVALUATION    LIST INFORMATION A SOCIOGRAM SHOULD REVEAL REGARDING      01655 20
               GROUP, SUBGROUPS, + INDIVIDUALS.                          01655 21
*FILE          SOCIOMETRICS  ADMINISTRATION + ANLYISING DATA             01655  9
```

```
*OBJECTIVES    SOCIOMETRIC TECHNIQUES TO ANALYZE GROUP STRUCTURE.        01656 15
               DEVELOP + PRACTICE SKILLS FOR USING                       01656 16
*PREREQUISITE  1654, 1655                                                01656 17
*EXPERIENCE    STUDENTS ANALYZE A SET OF QUESTIONNAIRES, DRAW SOCIO-GRAM.01656 11
               COMPARE AND DISCUSS RESULTS WITH OTHER CLASSMEMBERS.      01656 12
               DESCRIBE THE STRUCTURE OF THE GROUP, IDENTIFY SUB-GROUPS, 01656 13
               AND LOCATE LEADERS AND ISOLATED INDIVIDUALS.              01656 14
*SETTING       INDEPENDENT  SMALL GROUP ≥1-12 STUDENTS+ COLLEGE          01656 10
*MATERIALS     PROVIDE EACH STUDENT WITH A COMPLETE SET OF QUESTIONNARES 01656  5
               DEVELOPED IN MODULE 1654, OR A MODEL SET.  :  ≥L.E. XEROX 01656
               A COMPLETE SET FOR EACH STUDENT+                          01656
*LEVEL         GRADES 1-4  GRADES 5-8                                    01656  8
*GENERAL       ALL CANDIDATES                                            01656  7
*HOURS         2                                                         01656  6
*EVALUATION    SUCCESSFULLY COMPLETE SOCIO GRAM.  + IDENTIFY KEY         01656 18
               INDIVIDUALS + SUB-GROUPS.                                 01656 19
*FILE          SOCIOMETRICS STRUCTURE OF GROUPS                          01656  9
               SUB-GROUPS IDENTIFICATION.                                01656
```

```
*OBJECTIVES    TO POINT OUT THAT WE MUST USE MODERN TECHNOLOGY AND THE   01627 22
               MASS MEDIA TO PROVIDE FOR BETTER LEARNING EXPERIENCES FOR 01627 23
               OUR CHILDREN.                                             01627 24
*PREREQUISITE  READ THE ABOVE ARTICLES IN: EDUCATIONAL ISSUES IN A       01627 25
               CHANGING SOCIETY.                                         01627 26
*EXPERIENCE    DISCUSSION AFTER READING ASSIGNMENT: EDUCATIONAL ISSUES IN01627 11
               A CHANGING SOCIETY, EDITED BY AUGUST KERBER AND WILFRED   01627 12
               SMITH, WAYNE STATE UNIVERSITY PRESS, 1964, P.P. 51-73.    01627 13
               1. CAN MASS MEDIA BE USED AS TOOLS TO ENRICH OUR LIVING-  01627 14
               2. DOES MASS MEDIA HAVE THE POTENTIAL OF BRINGING MEANING 01627 15
               TO A HUMDRUM WORLD-  3. CAN MASS MEDIA BRING ABOUT SOCIAL 01627 16
               COHESION-  4. CAN MASS MEDIA PROVIDE THE MEANS OF         01627 17
               COMMUNICATION TO FACILITATE OUR UNDERSTANDING OF THE SAME 01627 18
               SOCIAL PATTERN-  5. WILL MASS MEDIA PROVIDE EDUCATIONAL   01627 19
               MOBILITY-  6. DOES MASS MEDIA HAVE A PLACE IN THE PROCESS 01627 20
               OF CULTURAL TRANSMISSION TO EACH OF US-                   01627 21
*SETTING       SMALL GROUP 21-12 STUDENTS+  COLLEGE                      01627 10
*MATERIALS     EDUCATIONAL ISSUES IN A CHANGING SOCIETY, EDITED BY AUGUST01627  5
               KERBER AND WILFRED SMITH, WAN                             01627
               KERBER AND WILFRED SMITH, WAYNE STATE UNIVERSITY PRESS,   01627
               1964.                                                     01627
*LEVEL         ALL GRADES                                                01627  8
*GENERAL       ALL CANDIDATES                                            01627  7
*HOURS         2                                                         01627  6
*EVALUATION    EVALUATION SHOULD TAKE PLACE AFTER FOLLOW UP MODULE.      01627 27
*FILE          MASS MEDIA  LEARNING  TECHNOLOGY                          01627  9
```

```
*OBJECTIVES    TO FIND SEVERAL WAYS OF UTILIZING THE MASS MEDIA IN          01628 13
               BRINGING ABOUT OUR EDUCATIONAL GOALS.                        01628 14
*PREREQUISITE PREVIOUS MODULE ON MASS MEDIA.                               01628 15
*EXPERIENCE    HAVE STUDENTS CONSTRUCT A SYSTEM OR PLAN WHICH WILL HELP     01628 11
               EDUCATORS IN USING MASS MEDIA TO IMPROVE OUR SOCIETY.        01628 12
*SETTING       SMALL GROUP 21-12 STUDENTS.  COLLEGE                         01628 10
*MATERIALS     BLANK                                                        01628  5
*LEVEL         ALL GRADES                                                   01628  8
*GENERAL       ALL CANDIDATES                                               01628  7
*HOURS         2                                                            01628  6
*EVALUATION    EVALUATE STUDENT IDEAS REGARDING THE CONSTRUCTIVE USE OF     01628 16
               MASS MEDIA.                                                  01628 17
*FILE          MASS MEDIA  EDUCATIONAL GOALS                                01628  9
```

```
*OBJECTIVES    TO SHOW HOW OUR SCHOOLS ARE SET UP TO CATEGORIZE STUDENTS 01629 16
               ACCORDING TO AGE, GRADE, SEX, PLACE OF RESIDENCE, AND        01629 17
               OTHER STATUS FACTORS.                                        01629 18
*PREREQUISITE NONE                                                          01629 19
*EXPERIENCE    LECTURE  1. AGE-GRADE ORGANIZATION.  2. THE 8-4 PLAN.  3. 01629 11
               THE JUNIOR-SENIOR HIGH PLAN.  4. THE 6-4-4 PLAN.  5.        01629 12
               UNGRADED UNITS.  6. THE TRUMP PLAN.  VISIT SCHOOLS IN AREA01629 13
               THAT FOLLOW THE ABOVE PLANS AND EVALUATE THEM WITH           01629 14
               REGARD TO THEIR AFFECT UPON THE STUDENTS.                    01629 15
*SETTING       LARGE GROUP  SCHOOL                                          01629 10
*MATERIALS     BLANK                                                        01629  5
*LEVEL         ALL GRADES                                                   01629  8
*GENERAL       ALL CANDIDATES                                               01629  7
*HOURS         1                                                            01629  6
*EVALUATION    DISCUSSION OF LECTURE REGARDING THE DIFFERENT WAYS WE        01629 20
               CATEGORIZE AND LABEL KIDS.                                   01629 21
*FILE          SOCIAL ORGANIZATIONS  GROUPING                               01629  9
```

```
*OBJECTIVES    TO FIND OUT WHAT PRESSURE GROUPS EXIST IN YOUR SCHOOL        01630 18
               DISTRICT AND WHAT EFFECTS THEY HAVE ON YOUR EDUCATIONAL      01630 19
               SYSTEM.                                                      01630 20
*PREREQUISITE DISCUSSION OR READINGS REGARDING POWER AND POWER             01630 21
               STRUCTURES.                                                  01630 22
*EXPERIENCE    SCHOOL COMMUNITY RELATIONSHIPS  WHATEVER THE PATTERN OF      01630 11
               SCHOOL-COMMUNITY INTERACTION, COMMUNITIES EXERT INFORMAL     01630 12
               AS WELL AS FORMAL PRESSURES ON THE SCHOOLS, AND SPECIAL      01630 13
               INTEREST GROUPS ADVOCATE PARTICULAR ATTENTION TO THEIR       01630 14
               CONCERNS.  DO A SURVEY SHOWING WHAT GROUPS IN YOUR           01630 15
               COMMUNITY THEIR ARE AND IN WHAT WAYS THEY EXERT PRESSURE     01630 16
               ON THE SCHOOL AND STATE THE KINDS OF PRESSURES THEY EXERT.01630 17
*SETTING       SMALL GROUP 21-12 STUDENTS,  COMMUNITY                       01630 10
*MATERIALS     BLANK                                                        01630  5
*LEVEL         ALL GRADES                                                   01630  8
*GENERAL       ALL CANDIDATES                                               01630  7
*HOURS         5                                                            01630  6
*EVALUATION    THE WRITTEN REPORT SHOULD BE EVALUATED.  THE REPORT SHOULD01630 23
               PRESENT SOME CONCLUSIONS AS TO THE POWER STRUCTURE OF THE 01630 24
               SCHOOL DISTRICT AND THE SCHOOL ITSELF.                       01630 25
*FILE          SCHOOL COMMUNITY  PRESSURE GROUPS                            01630  9
```

```
*OBJECTIVES    PERSONS WITH CHILDREN IN SCHOOLS AND THOSE IN DIRECT         01631 20
               CONTACT WITH THE SCHOOLS ARE LIKELIER TO BE SUPPORTIVE OF 01631 21
               THEM THAN THOSE WHO ARE NOT INVOLVED IN ANY WAY.  THIS       01631 22
               MODULE ATTEMPTS TO SHOW HOW WE CAN INVOLVE THE COMMUNITY. 01631 23
```

```
*PREREQUISITE READINGS REGARDING ENVIRONMENTAL INFLJENCES ON CHILDREN.  01631 24
*EXPERIENCE   SCHOOL COMMUNITY COOPERATION  THE STUDENT TEACHER SHOULD  01631 11
              VISIT SEVERAL HOMES OF HER STUDENTS AND LISTEN TO THE     01631 12
              PARENTAL VIEW POINTS ON EDUCATION, THEIR PHILOSOPHY OF    01631 13
              LIFE, POLITICS, DISCIPLINE, AND RELIGION ETC.  THE STUDENT01631 14
              TEACHER SHOULD THEN PRESENT A SYNOPSIS OF THESE INTERVIEWS01631 15
              TO THE INSTRUCTOR.  THIS SYNOPSIS SHOULD INCLUDE A        01631 16
              CONCLUSION REGARDING THE IMPLICATIONS OF THESE PARENTAL   01631 17
              ATTITUDES AND THE CHILDSS HOME LIFE ON HIS CLASSROOM      01631 18
              BEHAVIOR.                                                 01631 19
*SETTING      SMALL GROUP ≥1-12 STUDENTS+  COMMUNITY                    01631 10
*MATERIALS    BLANK                                                     01631  5
*LEVEL        ALL GRADES                                                01631  8
*GENERAL      ALL CANDIDATES                                            01631  7
*HOURS        5                                                         01631  6
*EVALUATION   EVALUATE THE TEACHERSS SYNOPSIS AND SEE IF HE OR SHE WAS  01631 25
              ABLE TO SEE ANY RELAITONSHIPS BETWEEN PARENTAL ATTITUDES  01631 26
              AND THE CHILDSS BEHAVIOR IN THE LEARNING SITUATION.       01631 27
*FILE         SCHOOL  COMMUNITY                                         01631  9
```

```
*OBJECTIVES   TO SHOW HOW KIDS BEHAVE IN DIFFERENT SETTINGS AND HOW     01632 16
              THEIR SOCIAL LIFE AFFECTS THEIR SCHOOL WORK.              01632 17
*PREREQUISITE PREVIOUS MODULE ON SCHOOL-COMMUNITY                       01632 18
*EXPERIENCE   THE SCHOOLS AND THE COMMUNITY  STUDENTS SHOULD SPEND ONE  01632 11
              EVENING WITH STUDENTS ≥KIDS+ AT THEIR FAVORITE HANG OUTS  01632 12
              AND SEE THEM INTERACTING IN THESE SITUATIONS.  THE STUDENT01632 13
              SHOULD THEN WRITE ABOUT THIS EXPERIENCE STATING WHAT KINDS01632 14
              OF BEHAVIOR THESE SAME KIDS WILL EXHIBIT IN THE CLASSROOM.01632 15
*SETTING      SMALL GROUP ≥1-12 STUDENTS+  COMMUNITY                    01632 10
*MATERIALS    BLANK                                                     01632  5
*LEVEL        ALL GRADES                                                01632  8
*GENERAL      ALL CANDIDATES                                            01632  7
*HOURS        5                                                         01632  6
*EVALUATION   THE WRITTEN REPORTS                                       01632 19
*FILE         SCHOOL  COMMUNITY  SOCIAL INTERACTIONS                    01632  9
```

```
*OBJECTIVES   TO SHOW THAT THE ABOVE ALLOCATION FUNCTION BEGINS IN THE  01633 19
              EARLY ELEMENTARY GRADES AND CONTINUES THROUGH THE CHILDSS 01633 20
              SCHOOL CAREER.                                            01633 21
*PREREQUISITE NONE                                                      01633 22
*EXPERIENCE   LECTURE PRESENTAITON:  1. FORMAL EDUCATION AS AN INTEGRAL 01633 11
              PART OF OUR COMPLEX SOCIAL SYSTEM IN THE U. S. AND 2.     01633 12
              PROVIDES THE FOUNDATION UPON WHICH OUR WHOLE OCCUPATIONAL 01633 13
              STRUCTURE IS BASED.  3. THE PARALLEL DEVELOPMENTS OF      01633 14
              EDUCATION FOR CONSTANTLY EXTENDED PERIODS OF YEARS AND THE01633 15
              DEVELOPMENT OF A HIGHLY INDUSTRIALIZED SOCIETY IN THE U. S01633 16
              . HAS MADE EDUCATION THE MAJOR AGENCY FOR OCCUPATIONAL AND01633 17
              STATUS ALLOCATION.                                        01633 18
*SETTING      SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01633 10
*MATERIALS    BLANK                                                     01633  5
*LEVEL        ALL GRADES                                                01633  8
*GENERAL      ALL CANDIDATES                                            01633  7
*HOURS        3                                                         01633  6
*EVALUATION   WRITE BRIEF REPORTS ON CHILDREN YOU TEACH AND SHOW HOW THE01633 23
              ABOVE MATERIAL WILL RELATE TO THESE KIDS.  THIS IS TO BE  01633 24
              DONE IN CONNECTION WITH FOLLOWING MODULE                  01633 25
*FILE         SCHOOL AS OCCUPAITONAL AGENCY  ≥SOCIAL STATUSES+          01633  9
```

```
*OBJECTIVES     TO DEMONSTRATE HOW OUR EDUCATIONAL INSTITUTIONS LIMITS THE01634 16
                RANGE OF SOCIAL STATUSES IN WHICH A PERSON MAY PERFORM AS 01634 17
                AN ADULT.                                                 01634 18
*PREREQUISITE PREVIOUS MODULE ON SCHOOL AS OCCUPATIONAL AGENCY ≥SOCIAL    01634 19
                STATUSES+                                                 01634 20
*EXPERIENCE     HAVE STUDENTS DO SOME RESEARCH TO SHOW THE FOLLOWING:  1. 01634 11
                TEACHER EVALUATIONS AND 2. STUDENT PERFORMANCES LARGELY   01634 12
                DETERMINES THE LEVEL AND TYPE OF EDUCATION WHICH EACH     01634 13
                CHILD WILL RECEIVE AND IN TURN THE RANGE OF SOCIAL        01634 14
                STATUSES IN WHICH A PERSON MAY PERFORM AS AN ADULT.       01634 15
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  SCHOOL                       01634 10
*MATERIALS      STUDENT FILES FROM SCHOOL AND CONTACT WITH HIM AND        01634  5
                KNOWLEGE OF HIS PRESENT JOB                               01634
*LEVEL          ALL GRADES                                                01634  8
*GENERAL        ALL CANDIDATES                                            01634  7
**HOURS         3                                                         01634  6
*EVALUATION     WRITTEN REPORTS                                           01634 21
*FILE           SOCIAL STATUSES  SCHOOL AS OCCUPATIONAL AGENCY            01634  9

*OBJECTIVES     TO POINT OUT THAT THE PREVALANT ASSUMPTIONS ABOUT HUMAN   01635 20
                LEARNING WHICH UNDERLIE OUR EDUCATIONAL PRACTICE WILL     01635 21
                UNNECESSARILY LIMIT THE LEVEL OF ACHIEVEMENTS IN OUR      01635 22
                SOCIETY.                                                  01635 23
*PREREQUISITE BLANK                                                       01635 24
*EXPERIENCE     LECTURE PRESENTATION: POINT OUT THAT MOST EDUCATORS       01635 11
                RECOGNIZE THE IMPORTANCE OF NON-GENETIC FACTORS SUCH AS   01635 12
                MOTIVATION AND SUB-CULTURAL DIFFERENCES IN EDUCATIONAL    01635 13
                NORMS ON THE NATURE AND EXTENT OF ACADEMIC ACHIEVEMENT.   01635 14
                BUT SHOW HAW WE STILL BASE MANY EDUCATIONAL POLICIES ON   01635 15
                THE ASSUMPTION OF A RESTRICTIVE, ORGANIC THEORY OF ABILITY01635 16
                , E.G., USE OF INTELLIGENCE AND RELATED TESTS TO CLASSIFY 01635 17
                STUDENTS INTO A WIDE RANGE OF CATEGORIES, EDUCATIONAL     01635 18
                PROGRAMS DESIGNED TO FIT THE PRESUMED LIMITS OF ABILITY.  01635 19
*SETTING        LARGE GROUP  COLLEGE                                      01635 10
*MATERIALS      BLANK                                                     01635  5
*LEVEL          ALL GRADES                                                01635  8
*GENERAL        BLANK                                                     01635  7
*HOURS          1                                                         01635  6
*EVALUATION     IF STUDENTS EXPRESS IN SOME FORM THAT THE MAXIMIZATION OF 01635 25
                THE COLLECTIVE ACHIEVEMENT IS MORE LIKELY TO OCCUR WHEN   01635 26
                ALL ARE GIVEN THE OPPORTUNITY TO LEARN THE DESIRED        01635 27
                BEHAVIOR WITH NO ASSUMPTIONS ABOUT LIMITED GENETIC ABILITY01635 28
*FILE           TESTING  ACHIEVEMENT                                      01635  9

*OBJECTIVES     TO ANSWER THE FOLLOWING QUESTION: DO THE ABOVE PRACTICES  01636 19
                INCREASE THE TOTAL LEVEL OF ACHIEVEMENT AND THE SUPPLY OF 01636 20
                HIGHLY EDUCATED FOR OUR SOCIETY.                          01636 21
*PREREQUISITE READINGS MENTIONED ABOVE                                    01636 22
*EXPERIENCE     LECTURE PRESENTATION: DISCUSS: GETZELS AND JACKSON AT     01636 11
                CHICAGO AND MCKINNEY AND OTHERS IN CALIFORNIA HAVE FOUND  01636 12
                NEGATIVE CORRELATION BETWEEN INDEXES OF CREATIVITY AND I. 01636 13
                Q. SCORES AND NO EVIDENCE OF ANY POSITIVE CORRELATION IN  01636 14
                THE TOTAL RANGE.  HIGHLY CREATIVE PEOPLE ARE APPARENTLY   01636 15
                FOUND AT MOST ANY POINT IN THE MENTAL TEST RANGE.         01636 16
                HOMOGENEOUS GROUPING AND SEPARATE SCHOOLS FOR DIFFERENT   01636 17
                ABILITY LEVELS AT THE ELEMENTARY AND SECONDARY LEVEL.     01636 18
*SETTING        LARGE GROUP  COLLEGE                                      01636 10
*MATERIALS      STRAUSS≤S STUDIES OF THE BACKGROUND OF PH. D≤S AT THE     01636  5
                UNIVERSITY OF MARYLAND AND JOHNS HOPKINS FROM 1952-57 AND 01636
```

```
              GUTILIERES STUDIES OF GRADUATE STUDENTS.                  01636
*LEVEL        ALL GRADES                                                01636  8
*GENERAL      ALL CANDIDATES                                            01636  7
*HOURS        1                                                         01636  6
*EVALUATION   IF STUDENT REACTION STATES IN SOME FORM OR THE OTHER THAT 01636 23
              WHEN PLACEMENT IS BASED ON THE ASSUMPTION OF DIFFERENTIAL 01636 24
              FIXED CAPACITY TO LEARN SUCH PRACTICES DO NOT INCREASE THE01636 25
              TOTAL LEVEL OF ACHIEVEMENT AND THE SUPPLY OF HIGHLY       01636 26
              EDUCATED FOR OUR SOCIETY.                                 01636 27
*FILE         TESTING  TEACHING PRACTICES                               01636  9
```

```
*OBJECTIVES   DEVELOP UNDERSTANDING OF WHEN + HOW SOCIOMETRIC TECHNIQUES01657 15
              CAN BE USED BY CLASSROOM TEACHER.                         01657 16
*PREREQUISITE 1654, 1655, 1656,                                         01657 17
*EXPERIENCE   DISCUSSION OF VARIOUS SOCIOGRAMS! WHAT DO THEY TELL ABOUT 01657 11
              THE GROUP, SUB. GROUPS, + GROUP MEMBERS. IS THIS          01657 12
              INFORMATION USEFUL TO THE TEACHER. SHOULD THE INFORMATION 01657 13
              EFFECT TEACHER BEHAVIOR, RELATED TO THE GROUP.            01657 14
*SETTING      SMALL GROUP 21-12 STUDENTS*                               01657 10
*MATERIALS    BLANK                                                     01657  5
*LEVEL        GRADES 1-4  GRADES 5-8                                    01657  8
*GENERAL      ALL CANDIDATES                                            01657  7
*HOURS        1                                                         01657  6
*EVALUATION   DESCRIBE APPROPRIATE TEACHER BEHAVIOR INDICATED BY A MODEL01657 18
              SOCIOGRAM TOWARD A GROUP, SUB-GROUP, OR INDIVIDUAL.       01657 19
*FILE         SOCIOMETRICS  GRP. INFORMATION  TEACHER BEHAVIOR.         01657  9
```

```
*OBJECTIVES   UTILIZE SOCIOMETRIC TECHNIQUES IN TEACHING SITUATION TO   01658 15
              INCREASE EFFECTIVENESS.                                   01658 16
*PREREQUISITE 1654-1657                                                 01658 17
*EXPERIENCE   USE SOCIOMETRIC TECHNIQUES TO ANALYZE A SCHOOL AGE GROUP. 01658 11
              AND ALTER APPROACH TO GROUP, SUB-GROUPS, OR INDIVIDUALS   01658 12
              IN TERMS OF SOCIOMETRIC INFORMATION! OBSERVE RESULTS.     01658 13
              DISCUSS WITH SUPERVISOR OR INSTRUCTOR.                    01658 14
*SETTING      INDEPENDENT                                               01658 10
*MATERIALS    BLANK                                                     01658  5
*LEVEL        GRADES 1-4  GRADES 5-8                                    01658  8
*GENERAL      ALL CANDIDATES                                            01658  7
*HOURS        2                                                         01658  6
*EVALUATION   DID ALTERED APPROACH CHANGE RELATIONS AS ANTICIPATED- WHY-01658 18
              WHY NOT- DID SOCIOMETRIC CLARIFY SOME OF THE GROUPS       01658 19
              INTERACTIONS.                                             01658 20
*FILE         SOCIOMETRICS  TEACHING BEHAVIOR                           01658  9
```

```
*OBJECTIVES   TO IDENTIFY ROLES AS A SIGNIFICANT ASPECT OF FORMAL GROUP01659 18
              + INFORMAL BEHAVIOR.                                      01659 19
*PREREQUISITE NONE                                                      01659 20
*EXPERIENCE   LECTURE PRESENTATION! ROLES ARISE AS A NATURAL CONSEQUENCE01659 11
              OF GROUP BEHAVIOR 2IE! LEADERS + FOLLOWS ARE INHERENT IN  01659 12
              GROUP STRUCTURE*  ROLES CAN BE FORMAL OR INFORMAL         01659 13
              2APPOINTED LEADER VS. LEADER WHICH EMERGES AS A RESULT OF 01659 14
              INTERACTION*  FORMAL ROLES EXIST INDEPENDENT OF           01659 15
              INDIVIDUALS 2IE. SCHOOL PRINCIPLE.*  INFORMAL ROSES ARISE 01659 16
              BECAUSE OF INDIVIDUALS 2IE. NATURAL LEADER*               01659 17
*SETTING      LARGE GROUP  COLLEGE                                      01659 10
*MATERIALS    BLANK                                                     01659  5
*LEVEL        BLANK                                                     01659  8
*GENERAL      BLANK                                                     01659  7
```

```
*HOURS         BLANK                                                  01659  6
*EVALUATION    NAME A FORMAL AND AN INFORMAL GROUP, + IDENTIFY ONE LEADER01659 21
               + ONE FOLLOWER.                                        01659 22
*FILE          GROUP ROLES  FORMAL OR INFORMAL STRUCTURE.             01659  9
```

```
*OBJECTIVES    TO DIFFERENTIATE BETWEEN (ROLES( WHICH INDIVIDUAL PLAY IN 01660 15
               GROUP SETTING.                                         01660 16
*PREREQUISITE NONE                                                    01660 17
*EXPERIENCE    READ PP. WILLARD WALLER, THE SOCIOLOGY OF TEACHING PP.  01660 11
               323-334  DISCUSS: THE BEHAVIOR WHICH EXEMPLIFIES EACH ROLE01660 12
               + EXAMPLES WHICH INSTRUCTOR OR STUDENTS CAN OFFER+ THE  01660 13
               INTER-RELATIONSHIP OF THE ROLES.                       01660 14
*SETTING       INDEPENDENT  SMALL GROUP ≥1-12 STUDENTS+  COLLEGE      01660 10
*MATERIALS     BLANK                                                  01660  5
*LEVEL         BLANK                                                  01660  8
*GENERAL       ALL CANDIDATES                                         01660  7
*HOURS         1                                                      01660  6
*EVALUATION    ABLE TO IDENTIFY THE ROLE WHEN GIVEN A DISCRIPTION OF THE 01660 18
               BEHAVIOR.                                              01660 19
*FILE          GROUP ROLES  GROUP SETTING  GROUP BEHAVIOR             01660  9
```

```
OBJECTIVES     AWARE OF RESEARCH BASED + EXPERIENCED BASED CONCLUSIONS  01672 18
               REGARDING THE RELATIONSHIP BETWEEN GROUP LEARNING +     01672 19
               ATTITUDES + EFFECTIVENESS                              01672 20
*EXPERIENCE    DISCUSSION:  COMPARE + CONTRAST CONCLUSIONS OF RESEARCH, 01672 11
               ASSIGNED READINGS + GROUP EXPERIENCE.  GENERALLY CONCLUDE 01672 12
               LAISSECZ-FAIRE GROUP: NOT EFFECTIVE + NEGATIVE ATTITUDES 01672 13
               AUTHORITARIAN GROUP: SUCCESS DEPENDS ON LEADER, NEGATIVE 01672 14
               ATTITUDES, FAST START, THEN SLOWS DOWN.  DEMOCRATIC GROUP 01672 15
               SLOW START- GAINS SPEED + EFFECTIVENESS+ POSITIVE       01672 16
               ATTITUDES.                                             01672 17
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                   01672 10
*MATERIALS     BLANK                                                  01672  5
*LEVEL         ALL GRADES                                             01672  8
*GENERAL       ALL CANDIDATES                                         01672  7
*HOURS         2                                                      01672  6
*PREREQUISITE 1668-1671                                               01672 21
*ECALUATION    CAN LIST ADVANTAGES AND DISADVANTAGES OF EACH ORGANIZATION01672 22
*FILE          GROUP DYNAMISC  GROUP LEADERSHIP  EFFECTS              01672  9
```

```
*OBJECTIVES    TO ACQUAINT STUDENTS WITH CONCEPT OF INTERACTION ANALYSIS 01673 18
*PREREQUISITE NONE                                                    01673 19
*EXPERIENCE    READ: FLANDERS, NED A.8 (DIAGNOSING AND UTILIZING SOCIAL 01673 11
               STURCTURES IN CLASSROOM GROUPS(  FIFTY-NINTH YEARBOOK OF 01673 12
               THE NATIONAL SOCIETY FOR THE STUDY OF EDUCATION, PART 2, 01673 13
               NELSON HENRY, EDITOR.  UNIVERSITY OF CHICAGO PRESS, 19608 01673 14
               PP. 187-219.  ≥ANY OTHER ARTICLE WHICH DESCRIBES THE    01673 15
               PROCESS WHICH NED FLANDERS DEVELOPED FOR INTERACTION-   01673 16
               ANALYSIS WILL BE APPROPRIATE+                          01673 17
*SETTING       INDEPENDENT  COLLEGE                                   01673 10
*MATERIALS     BLANK                                                  01673  5
*LEVEL         GRADES 1-4  GRADES 5-8                                 01673  8
*GENERAL       ALL CANDIDATES                                         01673  7
*HOURS         2                                                      01673  6
*EVALUATION    DEMONSTRATE AWARENESS OF CONCEPT BY DISCUSSION OR WRITING.01673 20
*FILE          GROUP INTERACTION  FLANDERSS                           01673  9
```

```
*OBJECTIVES    DEVELOP SKILLS OF RECORDING INTERACTION ANALYSIS.              01674 15
*PREREQUISITE 1673                                                           01674 16
*EXPERIENCE    VIEW OR LISTEN TO SHORT SECTION OF TAPE MARK GRID.            01674 11
               TABULATE, + CHECK + COMPARE WITH OTHER STUDENTS.  DISCUSS     01674 12
               DIFFERENCES: CONTINUE WITH SHORT SECTIONS UNTIL CLASS HAS     01674 13
               ARRIVED AT SOMEWHAT UNIFORM INTERPRETATION.                   01674 14
*SETTING       SMALL GROUP 21-12 STUDENTS,  COLLEGE                          01674 10
*MATERIALS     WORK SHEETS WITH NED FLANDERS CATAGORIES + POINT GRID +       01674  5
               EXPLANATION.  AUDIO TAPE, VIDEO TAPE, OR MOVIE OF CLASS       01674
               ROOM IN OPERATION.                                            01674
*LEVEL         GRADES 1-4  GRADES 5-8                                        01674  8
*GENERAL       ALL CANDIDATES                                                01674  7
*HOURS         2-3                                                           01674  6
*EVALUATION    DEMONSTRATE ABILITY TO USE GRID.                              01674 17
*FILE          GROUP INTERACTION  FLANDERS  SKILLS + PRACTICE                01674  9
```

```
*OBJECTIVES    USE INTER-ACTION ANALYSIS TO DESCRIBE ORGANIZATION OF         01675 15
               GROUP + ROLE OF TEACHER + CLASS MEMBERS.                      01675 16
*PREREQUISITE 1673-1674                                                      01675 17
*EXPERIENCE    1 RECORD GROUP INTERACTION [illegible] REAL GROUP, VIDEO-TAPE OR 01675 11
               MOVIE OF A GROUP, AUDIO-TAPE OF A GROUP, FOR COMPLETE         01675 12
               GROUP MEETING:  2 TABULATE + EVALUATE DATA  3 DEVELOPE        01675 13
               CONCLUSION.                                                   01675 14
*SETTING       INDEPENDENT  SMALL GROUP 21-12 STUDENTS,  COLLEGE             01675 10
*MATERIALS     SAME AS E-2                                                   01675  5
*LEVEL         GRADES 1-4  GRADES 5-8                                        01675  8
*GENERAL       ALL CANDIDATES                                                01675  7
*HOURS         2                                                             01675  6
*EVALUATION    ABLE TO DRIVE AT AND VERIFY CONCLUSION REGARDING              01675 18
               INTERACTION OF GROUP MEMBERS USING INTER-ACTION ANALYSIS.     01675 19
*FILE          GROUP INTERACTION  GROUP ORGANIZATION  TEACHER + STUDENT      01675  9
               ROM.                                                          01675
```

```
*OBJECTIVES    TO ACCESS THE RELEVANCE OF INTERACTION ANALYSIS               01676 13
*PREREQUISITE 1673, 1674, 1675                                               01676 14
*EXPERIENCE    DISCUSS: USES OF INTERACTION ANALYSIS VALIDITY OF PROCESS     01676 11
               SIGNIFICANCE FOR TEACHER                                      01676 12
*SETTING       SMALL GROUP 21-12 STUDENTS,  COLLEGE                          01676 10
*MATERIALS     BLANK                                                         01676  5
*LEVEL         GRADES 1-4  GRADES 5-8                                        01676  8
*GENERAL       ALL CANDIDATES                                                01676  7
*HOURS         1                                                             01676  6
*EVALUATION    ABLE TO DISCUSS USES, MISUSES, AND ABUSES OF INTERACTION      01676 15
               ANALYSIS CAN DISTINGUISH BETWEEN SIGNIFICANT +                01676 16
               INSIGNIFICANT CONCLUSION.  CAN DISTINGUISH BETWEEN            01676 17
               APPROPRIATE + INAPPROPRIATE APPLICATIONS.                     01676 18
*FILE          GROUP INTERACTION  VALIDITY  SIGNIFICANCE OF INTERACTION      01676  9
```

```
*OBJECTIVES    CONTACT WITH ACTUAL SITUATION INVOLVING (TEACHER ROLE(         01677 17
*PREREQUISITE 1676                                                           01677 18
*EXPERIENCE    INTERVIEW SCHOOL OR TEACHER REGARDING EXPERIENCES IN WHICH01677 11
               THEY WERE EXPECTED TO ACT WITHIN THE CONTEXT OF THE           01677 12
               (TEACHER ROLE( RATHER THAN AN INDIVIDUAL.  NOTE: SETTING,     01677 13
               PARTICIPANTS, BEHAVIOR, + ATTITUDES  DISCUSSION WITH          01677 14
               STUDENTS WHO INTERVIEWED TEACHERS.  COMPARE + CONTRAST        01677 15
               EXPERIENCES                                                   01677 16
*SETTING       INDEPENDENT  SMALL GROUP 21-12 STUDENTS,  SCHOOL OR           01677 10
               COMMUNITY                                                     01677
```

```
*MATERIALS     BLANK                                                  01677  5
*LEVEL         ALL GRADES                                             01677  8
*GENERAL       ALL CANDIDATES                                         01677  7
*HOURS         2                                                      01677  6
*EVALUATION    ABLE TO DISCUSS SITUATIONS IN WHICH TEACHERS ACTED AS A 01677 19
               ROLE RATHER THAN INDIVIDUAL                            01677 20
*FILE          SCHOOL SYSTEM ROLE  TEACHER ROLES                      01677  9
```

```
*OBJECTIVES    REALIZE THAT THE SCHOOL SYSTEM CASTS ALL PERSONNEL PARENTS01678 17
               STUDENTS ROLES WHICH EFFECT INDIVIDUAL BEHAVIOR.       01678 18
*PREREQUISITE NONE                                                    01678 19
*EXPERIENCE    READ: WESTBY-GIBSON, DOROTHY.  SOCIAL PERSPECTIVES ON  01678 11
               EDUCATION, JOHN WILEY + SONS INC., N. Y. 1965 PP 327-351 01678 12
               BREMBECK, COLE S. SOCIAL FOUNDATIONS OF EDUCATION.  JOHN 01678 13
               WILEY + SONS INC., 1966, PP. 295-320  WALLER, WILLARD.  01678 14
               THE SOCIOLOGY OF TEACHING, JOHN WILEY + SONS INC., N. Y. 01678 15
               1965 PP. 68-92 , 375-439.                              01678 16
*SETTING       INDEPENDENT  COLLEGE                                   01678 10
*MATERIALS     BLANK                                                  01678  5
*LEVEL         ALL GRADES                                             01678  8
*GENERAL       ALL CANDIDATES                                         01678  7
*HOURS         2                                                      01678  6
*EVALUATION    CAN RELATE BEHAVIOR TO ROLE                            01678 20
*FILE          SCHOOL SYSTEM ROLES  SCHOOL STRUCTURAL EFFECTS  BEHAVIOR 01678  9
               TO ROLE                                                01678
```

```
*OBJECTIVES    EXPERIENCE THE DYNAMICS FORCES ROLES HAVE ON BEHAVIOR  01679 16
*PREREQUISITE 1676, 1677, 1678                                        01679 17
*EXPERIENCE    ROLE PLAY TEACHERS, ADMINISTRATORS, SCHOOL BOARD MEMBER, 01679 11
               PARENT, OR STUDENT IN VARIOUS SITUATIONS WHICH TEACHERS 01679 12
               FACE.  (IE. ADMINISTRATOR QUESTIONING METHODOLOGY - PARENT01679 13
               WANTING TO MAKE PRESENTATION TO YOUR CLASS - PARENT    01679 14
               OBJECTING TO TEACHING SEX FACTS IN 6TH GRADE, ETC.)    01679 15
*SETTING       SMALL GROUP (1-12 STUDENTS)  COLLEGE                   01679 10
*MATERIALS     BLANK                                                  01679  5
*LEVEL         ALL GRADES                                             01679  8
*GENERAL       ALL CANDIDATES                                         01679  7
*HOURS         2                                                      01679  6
*EVALUATION    ABLE TO EXPLAIN THE JUSTIFICATION EACH PERSON WOULD GIVE 01679 18
               FOR BEHAVIOR WITHIN EACH ROLE.                         01679 19
*FILE          SCHOOL SYSTEM ROLES  ROLE PLAY                         01679  9
```

```
*OBJECTIVES    BECOME ACQUAINTED WITH SCHOOL AS A SOCIAL SYSTEM WHICH 01680 14
               HAS DYNAMIC RELATIONSHIP WITH COMMUNITY                01680 15
*PREREQUISITE NONE                                                    01680 16
*EXPERIENCE    READ.  WAER, WILLARD.  THE SOCIOLOGY OF TECHING PP. 103 01680 11
               -187 WESTBY-GIBSON, DOROTHY.  SOCIAL PERSPECTIVES ON   01680 12
               EDUCATION,  255-352                                    01680 13
*SETTING       INDEPENDENT COLLEGE                                    01680 10
*MATERIALS     BLANK                                                  01680  5
*LEVEL         ALL GRADES                                             01680  8
*GENERAL       ALL CANDIDATES                                         01680  7
*HOURS         3                                                      01680  6
*EVALUATION    ABLE TO LIST SCHOOL-COMMUNITY INTERACTION.             01680 17
*FILE          SCHOOL-COMMUNITY RELATIONS  SOCIAL SYSTEM OF SCHOOL    01680 09
               COMMUNITY INTERACTION                                  01680
```

```
*OBJECTIVES    UNDERSTAND IMPACT OF SCHOOL-COMMUNITY INTERACTION UPON        01681 14
               SCHOOL + CLASSROOM OPERATION                                  01681 15
*PREREQUISITE  1680                                                          01681 16
*EXPERIENCE    ANALYZE THE POLITICAL, LEGAL, ECONOMIC, AND SOCIAL            01681 11
               INTERACTION + INTERRELATIONSHIPS BETWEEN SCHOOL +             01681 12
               COMMUNITY                                                     01681 13
*SETTING       INDEPENDENT COMMUNITY-SCHOOL                                  01681 10
*MATERIALS     BLANK                                                         01681  5
*LEVEL         ALL GRADES                                                    01681  8
*GENERAL       ALL CANDIDATES                                                01681  7
*HOURS         FIVE - TEN                                                    01681  6
*EVALUATION    ABLE TO IDENTIFY THE FORMAL + INFORMAL DECISION MAKING        01681 17
               MAKING PATTERN WHICH EFFECT THE SCHOOLS                       01681 18
*FILE          SCHOOL-COMMUNITY RELATIONS  IMPACT ON CLASSROOM               01681  9

*OBJECTIVES    TO PREPARE THE STUDENTS TO UNDERTAKE A COMMUNITY STUDY        01682 24
               INVOLVING THE RELATIONSHIPS BETWEEN THE COMMUNITY AND          01682 25
               THE SCHOOL.                                                   01682 26
*PREREQUISITE  UNDERGRDUATE WORK IN HUMAN LEARNING                           01682 27
*EXPERIENCE    A TEAM OF INTENSIVE STUDY OF THE RELATIONSHIPS BETWEEN        01682 11
               SOCIOLOGY, ANTHROPOLOGY, PHILOSOPHY, AND EDUCATION UNDER      01682 12
               THE DIRECTION OF AN INTERDISCIPLINARY FACULTY TEAM            01682 13
               REPRESENTING THOSE AREAS.  AS THESE RELATIONSHIPS ARE         01682 14
               DISCUSSED THE FACULTY MEMBERS WILL INTRODUCE THE STUDENTS     01682 15
               TO THE RESEARCH TECHNIQUES AND PROCEDURES USED IN THEIR       01682 16
               AREAS.  THE LAST TWO WEEKS OF THE TEAM WILL BE USED IN        01682 17
               PRACTICAL EXERCISES DESIGNED TO PREPARE THE STUDENTS TO GO01682 18
               TO A COMMUNITY AND COMPLETE A STUDY INVOLVING THE             01682 19
               RELATIONSHIPS OF THE AREAS UNDER STUDY.  THE TOPIC AND        01682 20
               DESIGN OF THE STUDY WILL REQUIRE APPROVAL OF THE FACULTY      01682 21
               TEAM.  MODULED 2 THROUGH 8 ARE CONCERNED WITH SEGMENTS OF     01682 22
               THE TWO WEEK INTRODUCTORY PERIOD.                             01682 23
*SETTING       SMALL GROUP ≥1-12 STUDENTS† COMMUNITY + COLLEGE               01682 10
*MATERIALS     BLANK                                                         01682  5
*LEVEL         BLANK                                                         01682  8
*GENERAL       ALL CANDIDATES                                                01682  7
*HOURS         30                                                            01682  6
*EVALUATION    THE BREADTH, DEPTH, AND VALIDITY OF HIS STUDY.                01682 28
*FILE          GRAD SOC. FOUNDATIONS                                         01682  9

*OBJECTIVES    TO FAMILIARIZE THE STUDENTS WITH A BROAD VIEW OF THE          01683 14
               RELATIONSHIP OF THE SCHOOLS AND THE COMMUNITY.                01683 15
*PREREQUISITE  UNDERGRADUATE WORK IN HUMAN LEARNING.                         01683 16
*EXPERIENCE    READ:  NEWMANN AND OLIVER, ≤EDUCATION AND COMMUNITY≤,         01683 11
               HARVARD EDUCATIONAL REVIEW, XXXVII, NO. 1                     01683 12
               ≥WINTER 1967†, 61-106.                                        01683 13
*SETTING       SMALL GROUP ≥1-12 STUDENTS† COLLEGE                           01683 10
*MATERIALS     BLANK                                                         01683  5
*LEVEL         BLANK                                                         01683  8
*GENERAL       BLANK                                                         01683  7
*HOURS         2                                                             01683  6
*EVALUATION    THE DEPTH AND EXTENT OF HIS DISCUSSION OF THE ARTICLE IN      01683 17
               THE GRADUATE SMINAR.                                          01683 18
*FILE          GRADUATE FOUNDATIONS SCHOOL-COMMUNITY RELATIONS               01683  9

*OBJECTIVES    TO FAMILIARIZE THE STUDENT WITH SOME OF THE RELATIONSHIPS 01684 14
               BETWEEN SOCIOLOGY AND EDUCATION.                              01684 15
*PREREQUISITE  UNDERGRADUATE WORK IN HUMAN LEARNING                          01684 16
```

5

```
*EXPERIENCE    READ:  GROSS, ≤SOME CONTRIBUTIONS OF SOCIOLOGY TO THE        01684 11
               FIELD OF EDUCATION≤, HARVARD EDUCATIONAL REVIEW, XXIX,       01684 12
               NO. 4, ≥FALL 1959↑, 275-287.                                 01684 13
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑ COLLEGE                          01684 10
*MATERIALS     BLANK                                                        01684  5
*LEVEL         BLANK                                                        01684  8
*GENERAL       ALL CANDIDATES                                               01684  7
*HOURS         1                                                            01684  6
*EVALUATION    THE DEPTH AND EXTENT OF HIS PARTICIPATION IN DISCUSSION      01684 17
               OF THE ARTICLE.                                              01684 18
*FILE          GRADUATE FOUNDATIONS SOCIOLOGY                               01684  9

*OBJECTIVES    TO FAMILIARIZE THE STUDENT WITH SOME OF THE RELATIONSHIPS 01685 14
               BETWEEN CULTURAL ANTHROPOLOGY AND EDUCATION                  01685 15
*PREREQUISITE UNDERGRADUATE WORK IN HUMAN LEARNING.                         01685 16
*EXPERIENCE    READ:  PAULSEN, ≤CULTURAL ANTHROPOLOGY AND EDUCATION.≤       01685 11
               THE JOURNAL OF EDUCATIONAL SOCIOLOGY,XXXIV, NO.7 ≥MARCH      01685 12
               1961↑, 289-299                                               01685 13
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑ COLLEGE                          01685 10
*MATERIALS     BLANK                                                        01685  5
*LEVEL         BLANK                                                        01685  8
*GENERAL       ALL CANDIDATES                                               01685  7
*HOURS         1                                                            01685  6
*EVALUATION    EXTENT AND DEPTH OF HIS ANTICIPATION IN DISCUSSION OF        01685 17
               THE ARTICLE.                                                 01685 18
*FILE          GRADUATE FOUNDATIONS ANTHROPOLOGY                            01685  9

*OBJECTIVES    TO FAMILIARIZE THE STUDENT WITH SOME OF THE RELATIONSHIPS 01686 13
               BETWEEN ANTHROPOLOGY AND EDUCATION.                          01686 14
*PREREQUISITE UNDERGRADUATE WORK IN HUMAN LEARNING.                         01686 15
*EXPERIENCE    READ:  KUCLLER, EDUCATIONAL ANTHROPOLOGY, ≥NEW YORK: JOHN 01686 11
               WILEY AND SONS,INC., 1965↑, CHAPTER I.                       01686 12
*SETTING       SMALL GROUP≥1-12 STUDENTS↑ COLLEGE                           01686 10
*MATERIALS     BLANK                                                        01686  5
*LEVEL         BLANK                                                        01686  8
*GENERAL       ALL CANDIDATES M. A                                          01686  7
*HOURS         2                                                            01686  6
*EVALUATION    DEPTH AND EXTENT OF HIS PARTICIPATION IN DISCUSSION.         01686 16
*FILE          GRADUATE FOUNDATIONS ANTHROPOLOGY                            01686  9

*OBJECTIVES    TO FAMILIARIZE THE STUDENT WITH SOME OF THE RELATIONSHIPS 01687 14
               BETWEEN PHILOSOPHY AND EDUCATION.                            01687 15
*PREREQUISITE UNDERGRADUATE WORK IN HUMAN LEARNING                          01687 16
*EXPERIENCE    READ:  KNELLER, INTRODUCTION TO THE PHILOSOPHY OF            01687 11
               EDUCATION, ≥NEW YORK:  JOHN WILEY AND SONS, INC., 1964↑,     01687 12
               CHAPTER I.                                                   01687 13
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑ COLLEGE                          01687 10
*MATERIALS     BLANK                                                        01687  5
*LEVEL         BLANK                                                        01687  8
*GENERAL       ALL CANDIDATES M. A                                          01687  7
*HOURS         102                                                          01687  6
*EVALUATION    DEPTH AND EXTENT OF HIS PARTICIPATION OF HIS DISCUSSION.     01687 17
*FILE          GRADUATE  FOUNDATIONS  PHILOSOPHY                            01687  9

*OBJECTIVES    TO GIVE THE STUDENTS EXPERIENCE IN EVALUATING RESEARCH       01688 19
               PROJECTS AS AN INTRODUCTION TO THEIR OWN WORK.               01688 20
*PREREQUISITE UNDERGRADUATE WORK IN HUMAN LEARNING, AND PRECEDING           01688 21
```

```
               MODULES.                                                   01688 22
*EXPERIENCE    ANALYZE CASE STUDIES OF COMMUNITIES DONE IN THE THREE      01688 11
               AREAS WITH WHICH WE ARE CONCERNED.  THE FUNCTION OF THE    01688 12
               FACULTY TEAM DURING THIS PERIOD WILL BE TO POINT OUT THE   01688 13
               SIGNIFICANCE OF THE SOURCES USED, THE NATURE OF THE        01688 14
               RESEARCH DESIGN, THE VALIDITY OF THE CONCLUSIONS, AND THE  01688 14
               APPLICATION OF THIS TYPE OF RESEARCH TO EDUCATION.  THE    01688 15
               STUDENTS WILL BE REQUIRED TO START PLANNING THEIR OWN      01688 16
               STUDIES TOWARD THE END OF THE PERIOD, UNDER THE            01688 17
               SUPERVISION OF THE FACULTY TEAM.                           01688 18
*SETTING       SMALL GROUP 21-12 STUDENTS+ COLLEGE                        01688 10
*MATERIALS     CASE STUDIES OF COMMUNITIES DONE BY RESEARCHERS FROM THE   01688  5
               FIELDS OF SOCIOLOGY, ANTHROPOLOGY, AND ELEMENTARY          01688
               EDUCATION.                                                 01688
*LEVEL         BLANK                                                      01688  8
*GENERAL       ALL CANDIDATES                                             01688  7
*HOURS         6                                                          01688  6
*EVALUATION    THE BREADTH, DEPTH, AND VALIDITY OF THE STUDY DONE BY      01688 23
               THE STUDENT.                                               01688 24
*FILE          GRADUATE FOUNDATIONS RESEARCH                              01688  9
```

```
*OBJECTIVES    TO GIVE THE STUDENT EXPERIENCE IN GATHERING SOURCE         01689 19
               MATERIAL FOR HIS STUDY.                                    01689 20
*PREREQUISITE  EARLIER MODULES AND UNDERGRADUATE WORK IN HUMAN LEARNING.  01689 21
*EXPERIENCE    WORK WITH SIMULATED MATERIALS WHICH WILL BE TYPICAL OF THE01689 11
               COMMUNITY SOURCES UPON WHICH THE STUDENT WILL DRAW WHEN    01689 12
               PREPARING HIS STUDY.  DAILY PAPERS, SCHOOL CENSUS FIGURES,01689 13
               MINUTES OF CITY COUNCIL MEETINGS, BOARD OF EDUCATION       01689 14
               REPORTS, AND OTHER WRITTEN MATERIALS WILL BE AVAILABLE.    01689 15
               THERE WILL ALSO BE OPPORTUNITIES FOR ROLE PLAYING          01689 16
               INTERVIEWS WITH PARENTS, CHILDREN, TEACHERS, AND OTHER     01689 17
               COMMUNITY PERSONNEL.                                       01689 18
*SETTING       SMALL GROUP 21-12 STUDENTS+ COLLEGE                        01689 10
*MATERIALS     BLANK                                                      01689  5
*LEVEL         BLANK                                                      01689  8
*GENERAL       ALL CANDIDATES                                             01689  7
*HOURS         6                                                          01689  6
*EVALUATION    THE DEPTH, BREADTH, AND VALIDITY OF HIS STUDY.             01689 22
*FILE          GRADUATE FOUNDATIONS RESEARCH.                             01689  9
```

```
*OBJECTIVES    TO OBSERVE THAT INDIVIDUAL BEHAVIER CAN BE EFFECTED BY     01661 19
               THE ROLE THE INDIVIDUAL PLAYS.                             01661 20
*PREREQUISITE  1659-1660                                                  01661 21
*EXPERIENCE    OBSERVE AN INDIVIDUAL WHO PLACED IN VARIED ROLES IN        01661 11
               GROUPS.  ROLE PLAYING WHICH PLACES AN INDIVIDUAL IN        01661 12
               LEADERSHIP ROLE AND IN A FOLLWER ROLE, IN TWO DIFFERENT    01661 13
               FORMAL GROUPS, AND IN AN UNDEFINED ROLE IN AN INFORMAL     01661 14
               GROUP.  CLASS MEMBERS OBSERVE + DOCUMENT BEHAVIER OF       01661 15
               INDIVIDUALS AS THEY CHANGE ROLES.  DISCUSS: DID ROLE       01661 16
               CHANGE BEHAVIER+ WHICH ARRANGEMENT WAS MOST EFFECTIVE+     01661 17
               WHAT IS RELATIONSHIP BETWEEN ROLE + PERSONALITY.           01661 18
*SETTING       SMALL GROUP 21-12 STUDENTS+  COLLEGE                       01661 10
*MATERIALS     BLANK                                                      01661  5
*LEVEL         BLANK                                                      01661  8
*GENERAL       BLANK                                                      01661  7
*HOURS         TWO-FOUR                                                   01661  6
*EVALUATION    RECOGNIZE CHANGES IN INDIVIDUAL BEHAVIER WHICH RESULT FROM01661 22
               ROLE CHANGE.                                               01661 23
*FILE          GROUP ROLES  ROLE PLAYUNG                                  01661  9
```

```
*OBJECTIVES     EXPERIENCE CHANGES IN BEHAVIER WHICH RESULT FROM ROLE       01662 15
                CHANGE.                                                     01662 16
*PREREQUISITE 1659, 1660                                                    01662 17
*EXPERIENCE     PLACE STUDENT IS VARIED ROLES IN FORMAL + IN INFORMAL       01662 11
                GROUPS.  ≥SEE 1661↑ DISCUSS: FEELINGS REGARDING CARIOUS     01662 12
                ROLES+ WHICH ARRANGEMENT WAS MOST COMFORTABLE^ MOST         01662 13
                EFFECTIVE^ WHY^                                             01662 14
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                        01662 10
*MATERIALS      BLANK                                                       01662  5
*LEVEL          BLANK                                                       01662  8
*GENERAL        BLANK                                                       01662  7
*HOURS          TWO-FUUR                                                    01662  6
*EVALUATION     RECUGNIZE + RECORD BEHAVIER CHANGES WHICH RESULT FROM       01662 18
                ROLE CHANGE.                                                01662 19
*FILE           GROUP ROLES  FORMAL + INFORMAL GRPS  FEELINGS               01662  9
```

```
*OBJECTIVES     TO OBSERVE THAT ROLE CAN BE MODIFIED BY INDIVIDUAL          01663 19
                PERSONALITY.                                                01663 20
*PREREQUISTIE 1659, 1660                                                    01663 21
*EXPERIENCE     OBSERVE A SERIES OF GROUPS WITH CONSISTENT GROUP SITUATION01663 11
                ≥IE GOALS, NUMBER OF MEMBERS, TASKS, TIME, ETC. REMAIN      01663 12
                CONSTANT↑ BUT DIFFERENT INDIVIDUAL MEMBERS.  RECORD         01663 13
                DIFFERENCES IN EFFECTIVENERS + NATURE OF ASSIGNED ROLE:     01663 14
                ≥IE EACH OBSERVING STUDENT OBSERVES THE SAME ONE OR TWO     01663 15
                SPECIFIC ROLES IN EACH MEMBERSHIP ARRAGEMENT.  OBSERVES     01663 16
                WITH INSTRUCTOR DISCUSS THE EFFECT INDIVIDUAL               01663 17
                PERSONALITIES HAD ON EACH ROLE                              01663 18
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑ COLLEGE                         01663 10
*MATERIALS      BLANK                                                       01663  5
*LEVEL          GRADES 1-4  GRADES 5-8                                      01663  8
*GENERAL        ALL CANDIDATES                                              01663  7
*HOURS          ONE-TWO HOURS                                               01663  6
*EVALUATION     ABLE TO RECOGNIZE, EXPRESS + DOCUMENT ROLE CHANGES          01663 22
                EFFECTED BY PERSONILITY OF INDIVIDUAL, IN DISCUSSION        01663 23
                SETTING                                                     01663 24
*FILE           GROUP ROLES  GROUP TASK BEHAVIOR  PERSONALITY               01663  9
```

```
*OBJECTIVES     RECOFNIZE DIFFICIENCIES IN GROUP PROCESSES WHICH ARE THE    01664 17
                RESULT OF ROLE + PERSONALITY CONFLICTS OR INADEQUACIES.     01664 18
*PREREQUISITE 1659-1663                                                     01664 19
*EXPERIENCE     OBSERVE 10 GROUPS IN OPERATION ≥LIVE, VIDEO-TAPE, OR        01664 11
                MOVIE↑ THESE SHOULD BE MODEL CASES ≥IE NO LEADER, MORE      01664 12
                THAN ONE LEADER, ALL LEADERS, NO RECORDER ETC.↑  STUDENTS   01664 13
                RECORD THEIR PERCEPTIONS REGARDING ROLES + PERSONALITIES    01664 14
                INVOLVED.  DISCUSSION BASED ON SHARED OBSERVATION.  THIS    01664 15
                IS TO BE REPEATED USING DIFFERENT MODELS.                   01664 16
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                        01664 10
*MATERIALS      BLANK                                                       01664  5
*LEVEL          GRADES 1-4  GRADES 5-8                                      01664  8
*GENERAL        ALL CANDIDATES                                              01664  7
*HOURS          TWO                                                         01664  6
*EVALUATION     EXHIBITS INCREASING EFFECTIVENESS AT RECOGNIZING +          01664 20
                DOCUMENTING SPECIFIC CONFLICT.  CAN RECOGNIZE PATTERNS      01664 21
                SOONER THAN BEFORE EXPERIENCE OF THIS MODULE.               01664 22
*FILE           GROUP ROLES  PERCEPTION  GROUP PREOCESSES                   01664  9
```

```
*OBJECTIVES     ABLE TO ADJUST BEHAVIER OF SELF OR OTHERS TO IMPLEMENT     01665 16
                GROUP EFFECTIVENESS                                        01665 17
*PREREQUISITE 1659-1663                                                    01665 18
*EXPERIENCE     INVOLVED IN A GROUP WHICH HAS A TASK, ANNLYIZE NENECRSSARY01665 11
                ROLES, MEMBERS, + EFFECTIVELY ADJUST OWN BEHAVIER TO BEST  01665 12
                CONFORM TO GROUPS NEEDS.  OR: SUPERVISING GROUP WHICH      01665 13
                HAS A TASK, HELP GROUP ANALYZE NEEDS + MEMBERS, AND        01665 14
                DEVELOP EFFECTIVE ORGANIZATION.                            01665 15
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                       01665 10
*MATERIALS      BLANK                                                      01665  5
*LEVEL          GRADES 1-4  GRADES 5-8                                     01665  8
*GENERAL        ALL CANDIDATES                                             01665  7
*HOURS          ONE-TWO                                                    01665  6
*EVALUATION     ABLE TO ADJUST ROLES + PERSONALITIES TO INCREASE           01665 19
                EFFECTIVENESS OF GROUP.                                    01665 20
*FILE           GROUP ROLES  TASK GROUP  GROUP EFFECTIVENESS               01665  9
```

```
*OBJECTIVES     TO BECOME ACQUAINTED WITH THE CONCEPT THAT THE CLASSROOM   01666 16
                IS A MIRCO-SOCIETY                                         01666 17
*PREREQUISITE NONE                                                         01666 18
*EXPERIENCE     READ: COLE S. BREMBECK. SOCIAL FOUNDATIONS OF EDUCATION,   01666 11
                JOHN WILEY + SONS INC., N.Y., 1966. PP 32-58.  DISCUSS:    01666 12
                1.↑ SOCIAL STRUCTURE OF CLASSROOM.  2.↑ ADMINISTRUTION OF  01666 13
                CLASSROOM.  3.↑ SOCIAL INTERACTION IN THE CLASSROOM.  4.↑  01666 14
                REWARDS + PUNISHMENTS IN THE CLASSROOM.                    01666 15
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                       01666 10
*MATERIALS      BLANK                                                      01666  5
*LEVEL          BLANK                                                      01666  8
*GENERAL        BLANK                                                      01666  7
*HOURS          BLANK                                                      01666  6
*EVALUATION     BE ABLE TO DISCUSS THE CLASSROOM AS A MIRCO-SOCIETY        01666 19
*FILE           CLASS ROOM AS MICRO-SOCIETY  SOCIAL STRUCTURE OF CLASS     01666  9
                ROOM  REWARDS + PUNISHMENT                                 01666
```

```
*OBJECTIVES     TO DEVELOP SKILLS OF OBSERVING SOCIAL FACTORS EFFECTING    01667 20
                CLASSROOM OPERATION.                                       01667 21
*PREREQUISITE 1666                                                         01667 22
*EXPERIENCE     1.↑ VIEW A VIDEO-TAPE OF A FORMAL CLASSROOM IN OPERATION:  01667 11
                IDENTIFY AS MANY OF THE SOCIAL FACTORS EFFECTING THE       01667 12
                OPERATION OF THE CLASS AS POSSIBLE.  TRY TO DETERMINE:     01667 13
                1.↑ ORGANIZATIONAL STRUCTURE 2.↑ ROLE OF TEACHER 3.↑ ROLE 01667 14
                OF INDIVIDUAL STUDENTS 4.↑ REWARDS + PUNISHMENTS 5.↑       01667 15
                OUTSIDE INFLUENCES.  2.↑ VIEW VIDEO-TAPE OF INFORMAL       01667 16
                CLASSROOM IN OPERATION: ≥DO SOME AS ABOVE↑  3.↑ DISCUSS:   01667 17
                DIFFERENCES + SIMILARITES APPROPRIATENESS + INAPPROPRIATE 01667 18
                ASPECTS + APPLICATIONS.                                    01667 19
*SETTING        INDEPENDENT  SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE          01667 10
 MATERIALS      IMPACT OF SOCIAL FACTORS ON GROUP + INDIVIDUAL LEARNING.   01667  5
                IMPACT OF SOCIAL FACTORS UPON TEACHERS ROLE.               01667
*LEVEL          ALL GRADES                                                 01667  8
*GENERAL        ALL CANDIDATES                                             01667  7
*HOURS          THREE                                                      01667  6
*EVALUATION     ABLE TO LIST AT LEAST ONE FIVE SOCIAL FACTORS WHICH        01667 23
                EFFECTED OPERATION OF CLASSROOM.                           01667 24
*FILE           CLASSROOM AS MICRO-SOCIETY  INTERACTIONAL BEH. IN          01667  9
                CLASSROOM  SKILLS-GROUP PERSONAL                           01667
```

```
*OBJECTIVES     EXAMINE FEELINGS REGARDING GROUP WORK ESTABLISH BASIS FOR 01668 21
```

```
                RELATING INDIVIDUAL FEELINGS TO GROUP ORGANIZATION.      01668 22
*PREREQUISITE   NONE                                                     01668 23
*EXPERIENCE     ESTABLISH + MEET WITH THREE GROUPS: TELL STUDENTS THAT   01668 11
                THEY ARE TO RECORD THEIR FEELINGS ABOUT GROUP WORK.      01668 12
                SEPARATE THE GROUPS + MEET WITH EACH SEPARATELY.  SET UP 01668 13
                ONE GROUP IN AN AUTHORITIAN MANNER: ASSIGN TASK, APPOINT 01668 14
                ROLES, ESTABLISH DEADLINE.  SET UP ONE GROUP IN A        01668 15
                DEMOCRATIC MANNER: ASSIST GROUP IN DETERMING ITS OWN TASK,01668 16
                THE ROLE OF ITS MEMBERS + DEADLINE.  SET UP ONE GROUP IN A01668 17
                LAISSEZ-FIRE MANNER: DO NOTHING FOR THEM, JUST MEET WITH 01668 18
                THEM.  VIDEO-TAPE FIRST MEETING ONE WORKING SESSION, +   01668 19
                LAST MEETING OF EACH GROUP.                              01668 20
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                     01668 10
*MATERIALS      BLANK                                                    01668  5
*LEVEL          ALL GRADES                                               01668  8
*GENERAL        ALL CANDIDATES                                           01668  7
*HOURS          10-15                                                    01668  6
*EVALUATION     PARTICIPATE IN GROUP + ABLE TO EXPRESS FEELINGS ABOUT    01668 24
                GROUP WORK                                               01668 25
*FILE           GROUP DYNAMICS  SENSITIOITY TO FEELINGS  GROUP LEADERSHIP 01668  9
```

```
*OBJECTIVES     OBSERVE THAT GROUP STRUCTURE EFFECTS INDIVID + GROUP     01669 17
                FEELINGS + PERFORMANCE                                   01669 18
*PREREQUISITE   1668                                                     01669 19
*EXPERIENCE     PANEL DISCUSSION: PANEL MADE OF REPRESENTATIVE MEMBERS   01669 11
                FROM EACH GROUP IN MODULE 1668 TO DISCUSS THE FEELINGS OF 01669 12
                THE MEMBERS + THEMSELVES REGARDING GROUP WORK, THEIR     01669 13
                FEELINGS TOWARD OTHER GROUP MEMBERS, + THEIR GROUPS      01669 14
                SUCCESS+ COMPARE ORGANIZATION OF GROUP WITH FEELINGS +   01669 15
                OUTCOMES.                                                01669 16
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                     01669 10
*MATERIALS      BLANK                                                    01669  5
*LEVEL          ALL GRADES                                               01669  8
*GENERAL        ALL CANDIDATES                                           01669  7
*HOURS          ONE                                                      01669  6
*EVALUATION     ABLE TO DISCUSS + LIST ORGANIZATIONAL BASIS + RELATED    01669 20
                FEELINGS + EFFECR                                        01669
                FEELINGS + EFFECTIVENESS OF ALL THREE GROUPS.            01669 21
*FILE           GROUP DYNAMICS  FEELINGS SENSITATION                     01669  9
```

```
*OBJECTIVES     BROADEN PERSPECTIVE REGARDING RELATIONSHIP BETWEEN GROUP  01670 17
                ORGANIZATION AND INDIVIDUAL + GROUP ATTITUDES + SUCCESS.  01670 18
*PREREQUISITE   1668, 1669                                                01670 19
*EXPERIENCE     READ: WILLARD WALLER, THE SOCIOLOGY OF TEACHING, JOHN     01670 11
                WILEY + SONS INC., N.Y., 1965, PP 292-317 ≥318-338        01670 12
                OPTIONAL† READ: COLE S. BREMBECK, SOCIAL FOUNDATIONS OF   01670 13
                EDUCATION, JOHN WILEY + SONS INC, N.Y., 1966, PP 61-115   01670 14
                READ: ONE RELATED RESEARCH STUDY.  ≥BIHLIOGROPHY IN ABOVE 01670 15
                SELECTIONS HAS SUGGESTIONS†                               01670 16
*SETTING        INDEPENDENT  COLLEGE                                      01670 10
*MATERIALS      BLANK                                                     01670  5
*LEVEL          BLANK                                                     01670  8
*GENERAL        BLANK                                                     01670  7
*HOURS          THREE                                                     01670  6
*EVALUATION     ABLE TO EXTENT, ELNBORATE, + REFINE EVALUTION LIST OF     01670 20
                PRECEEDING MODULE,                                        01670 21
*FILE           GROUP DYNAMICS  GROUP ATMOSPHERE  ATTITUDES + SUCCESS     01670  9
```

```
*OBJECTIVES     OBSERVE + IDENTIFY THE RELATIONSHIP BETWEEN GROUP         01671 18
                ORGANIZATION + ATTITUDES + EFFECTIVENESS.                 01671 19
*PREREQUISITE 1668, 1669, 1670                                            01671 20
*EXPERIENCE     VIEW SELECTED PORTIONS OF THE VIDEO-TAPES OF THE GROUPS IN01671 11
                OPERATION: STOP TAPES TO DISCUSS. NOTE: 1.+ IDENTIFY      01671 12
                ORGANIZATION OF EACH GROUP. 2.+ MANNER OF SETTING UP      01671 13
                ORGANIZATION.  3.+ CONTRAST FIRST, MID, + LAST SESSION OF 01671 14
                EACH GROUP: LOOK FOR SOCIAL + OPERATIONAL DEVELOPMENT.    01671 15
                4.+ WATCH FOR KEY EVENTS WHICH REVEAL ATTITUDE ECPRESSION,01671 16
                CHANGE, OR CONFLICT.                                      01671 17
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01671 10
*MATERIALS      BLANK                                                     01671  5
*LEVEL          BLANK                                                     01671  8
*GENERAL        BLANK                                                     01671  7
*HOURS          TWO                                                       01671  6
*EVALUATION     ABLE TO CORRECTLY IDENTIFY EACH GROUP                     01671 21
*FILE           GROUP DYNAMICS  ORGANIZATION  EFFECTIVENESS OF GROUP      01671  9
```

```
*OBJECTIVES     TO TRAIN THE STUDENT TO MAKE CRITICAL ANALYSES OF RESEARCH01690 23
                PROJECTS, INCLUDING HIS OWN.                              01690 24
*PREREQUIAITE   PRECEDING MODULES.                                        01690 25
*EXPERIENCE     ONE WEEK OF EVALUATION OF THE COMMUNITY STUDIES DONE BY   01690 11
                THE STUDENTS, THE EVALUATION TO TAKE PLACE ON CAMPUS WITH 01690 12
                THE ENTIRE FACULTY TEAM IN ATTENDANCE.  EACH SUTDENT WILL 01690 13
                BE REQUIRED TO MAKE AN ORAL PRESENTATION OF THE MAJOR     01690 14
                FINDINGS OF HIS STUDY, INCLUDING ITS IMPLICATIONS FOR     01690 15
                EDUCATION AND FOR FUTURE RESEARCH.  HE WILL BE EXPECTED TO01690 16
                ANSWER PERTINENT QUESTIONS RAIDES BY BOTH STUDENTS AND    01690 17
                FACULTY.  EACH STUDENT IN THE CLASS WILL BE REQUIRED TO   01690 18
                MAKE A WRITTEN EVALUATION OF THE OTHER STUDENTS PAPERS,   01690 19
                WITH THE FACULTY MEMBERS MAKING A FINAL EVALUATIOM BASED  01690 20
                ON THE STUDY AND THE STUDENTSS EVALUATION OF THE WORK OF  01690 21
                HIS FELLOW-STUDENTS.                                      01690 22
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                      01690 10
*MATERIALS      BLANK                                                     01690  5
*LEVEL          BLANK                                                     01690  8
*GENERAL        ALL CANDIDATES                                            01690  7
*HOURS          30                                                        01690  6
*EVALUATION     THE QUALITY OF HIS STUDY, HIS ABILITY TO DEFEND IT, AND   01690 26
                HIS CRITICAL ANALYSIS OF OTHER RESEARCH STUDIES.          01690 27
*FILE           GRADUTE  FOUNDATIONS                                      01690  9
```

ADVANCED BEHAVIORAL SCIENCE RESEARCH BASED STUDY FOCUSED UPON EDUCATIONAL PSYCHOLOGY

Table of Contents

I. BASIC PRINCIPLES OF CHILD DEVELOPMENT VII-266

A. The Effects of Early Experience VII-266
B. How Concepts are Learned and Attained VII-267
C. Basic Principles of Language Development VII-269
D. Factors Related to Mental Retardation VII-270

II. SOCIAL LEARNING AND PERSONALITY DEVELOPMENT VII-271

A. Basic Principles of Social Learning VII-271
B. Biological and Constitutional Factors VII-272
C. Influence of Imitation, Identification and Role Playing VII-272
D. Deviant Behavior VII-273
E. Basic Principles for the Modification of Behavior . . VII-273
F. Family Structure, Personality, and Socialization . . . VII-274
G. Social Structure in the Classroom VII-276
H. Patterns of Adjustment in Adolescence VII-277

III. THE MOTIVATIONAL PROCESSES VII-278

A. Motivation Viewed as Homeostasis VII-278
B. Frustration Conflict and Stress are extreme conditions which give rise to or occur simultaneously with states of motivation VII-279
C. Types of Human Motives VII-280
D. Basic Principles of Social Motivation VII-280
E. Self-Actualization as a Source of Motivation VII-281
F. Motivation as Related to Learning VII-282

IV. FORMAL ASPECTS OF LEARNING VII-283

A. Respondent Conditioning (Also Known as Pavlovian and Classical Conditioning). VII-283
B. Operant Conditioning (Also Known as Instrumental and Skinnerian Conditioning) VII-285
C. Concept Formation VII-289
D. Problem Solving VII-296
E. Transfer and Retention VII-305

V. MEASUREMENT AND EVALUATION VII-310

- A. Purposes of Evaluation and Measurement VII-310
- B. Test Characteristics VII-311
- C. Standardized Tests VII-313

VI. COMMUNICATION PROCESSES VII-320

- A. Theories of Communication center about three principle traditions--mathematical, social psychological, and linguistic VII-320
- B. The purpose and Fidelity of Communication Centers about basic processes of human interaction VII-321
- C. Communication and Learning both need to be understood in terms of the variables which underly behavior and behavior change VII-322
- D. Interpersonal Communications focus primarily on the interdependence of the source and the receiver VII-323
- E. Social Factors operate to influence the communication process VII-324
- F. Communications Breakdowns relates to the problems in predicting behavior from the knowledge of social systems VII-324
- G. The Focus on Meaning in Communication relates to attending to the various aspects of the message as an ingredient of communication VII-324

ADVANCED BEHAVIORAL SCIENCE RESEARCH BASED STUDY

FOCUSED UPON EDUCATIONAL PSYCHOLOGY

I. BASIC PRINCIPLES OF CHILD DEVELOPMENT

A. The Effects of Early Experience.

1. Research problems in this area are numerous, it is exceedingly difficult to demonstrate that a particular parental practice has produced a particular effect.
    - a. Conceptual problems center about the difficulty in defining terms such as demand, feeding, weaning, toilet training, etc.
    - b. Criterion factors against which the effects of infant care practices are evaluated are varied and often vague.
    - c. Assessment techniques have similarly been varied, ranging from superficial questionnaires to highly sophisticated depth analyses.
    - d. Data in infant care studies are often derived through retrospect.
    - e. Little attention has been given to the reactive factors of subjects which might cause different responses to similar parental practices.
    - f. Difficulty arises in attempting to determine what represents a reasonable period of time for assessing such effects.
2. Separation from parents during early childhood may have disastrous consequences.
    - a. The early studies of Spitz indicated the eventual withdrawal, despair and resignation of the child with maternal separation.
    - b. Ribble pointed to the possible serious physiological effects of maternal deprivation.
    - c. Bowlby pointed to the lack of adequate emotional reactivity in deprived infants.
    - d. The age of separation seems to be a crucial variable-reactions to separation seem to be less severe when they occur very early in infancy, before stable relationships with the parents have occurred.
    - e. Children closest to their parents showed greatest reactions with separation.
    - f. The quality of maternal care subsequent to separation is an important ameliorating factor.
    - g. The shorter the separation the less severe the results.
    - h. There may be constitutional factors which influence sensitivity and response.
3. The effects of infant care have also been thoroughly investigated.
    - a. Minimal but positive evidence exists to support the notion that a self regulated feeding routine is most satisfactory to the infant.

b. The type of elimination training technique employed tends to produce specific reactions based on both the age of initation and severity of such procedures.
c. Social class differences in parental child rearing practices are narrowing.
d. Different infants do not react identically to the same experience.

4. The way in which sex roles have been acquired are described mainly in the works of psychoanalytic and behavioral theorists.
   a. Sex roles include physical attributes, overt mannerisms, and a set of feelings, attitudes, motives and beliefs.
   b. Differential patterns of identification with mother, father, siblings, and peers operates to determine degree of masculinity or feminity.
   c. Acquisition of sex-typed skills, and congruent sex-role experience are influential in determination of sex roles.
   d. Lower-class children tend to adopt sex-typed traits earlier in their development and with greater consistency.
5. Interest in parental disciplinary techniques emerges as a result of the findings of a high degree of atypical discipline in the case histories of problem children and adults.
   a. Social class strongly influences the type of discipline.
      (1) Middle-class parents use more warmth, reasoning, isolation, and guilt-arousal.
      (2) Lower-class use ridicule, shouting and physical punishment.
   b. Research indicates that:
      (1) Power-assertive techniques tend to promote aggression, and resistance to authority.
      (2) Warmth, reasoning and guilt-arousal tends to promote self-responsibility and guilt.
      (3) Restrictiveness promotes well-controlled, socialized behavior, but also tends to lead to fearful, dependent, and submissive behaviors.
      (4) Permissiveness tends to foster outgoing, sociable, assertive behaviors, but also tends to decrease persistence and increase aggressiveness.
      (5) Inconsistent discipline seems to result in increased conflict and hostility in the child.

B. How Concepts are Learned and Attained.

1. Concepts are employed to organize the environment and solve problems effectively.
2. Classes or categories help reduce ambiguity and imprecision.
3. Piaget is one of the foremost proponents of the notion that concept development always follows the same general pattern.
   a. The sensory-motor period occurs during the first two years in which the infant moves from a primarily reflective organism to one which develoрes intellectually through motoric coordination.

b. The preoperational thought period exists from the ages of two to seven, and is further subdivided:
   (1) The preoperational phase which occurs during the ages of two and four, and witnesses the turning from motoric reasoning and thinking to the beginnings of symbolic thought.
   (2) The intutive phase which appears from four to seven manifests increased symbolic functioning.

c. The stage of concrete operations occurs from the ages of seven to eleven, and the reasoning processes begin to appear logical.

d. The period of formal operations extends from the ages of eleven to fifteen, and is represented by truly logical formal operations.

4. There is a wide variety of concepts which are acquired.
   a. Children must learn to differentiate objects from themselves and as possessing their own independent permanence.
   b. Spatial relations center about the comprehensions of a single objective space which encompasses objects, individuals, and events.
   c. Form is an essential feature to be discriminated if the identification of objects in space is to occur.
   d. Color plays a significant role in psychological theory as a basis of organization.
   e. The ability to abstract size and to see its relativity seems to depend upon the ability to conserve and relate.
   f. The attainment of causal relationships is integral to intellectual functioning.
   g. Conservation of mass, volume and weight develops sequentially.
   h. The research evidence relating to concept attainment indicated that:
      (1) the achievement of object permanence seems to occur during the preverbal stage.
      (2) there is a step-by-step developmental process from tapological, to projective, to Euclidian space.
      (3) infants can discriminate form as young as three weeks.
      (4) children under five years of age can not typically handle color, form, and size as simultaneous bases for classification.
      (5) while there is a crude correspondence with age, in terms of explanations for physical and psychical phenomena, this is not a one-to-one relationship.
      (6) conservation develops in a sequence, with the mental age of the child serving as a major factor in the determination of the onset of the stage.

5. Several factors influence the course of concept development both positively and negatively.
   a. Efficiency of concept attainment appears to be related with a higher I.Q.
   b. Individual differences as a result of differential rates of growth similarly effect concept attainment.
   c. The degree of mental retardation influences the level of conceptualization.

d. Emotional states and attitudes, and motivational considerations also influence the process.
e. Brain-damage tends to result in more concrete operations.
f. The concept in question cannot be taught unless the child has achieved a particular level of cognitive maturity.

6. There are some broad implications of the knowledge amassed with regard to concept formation.
   a. Educational curricula could be arranged, for example, around the notion that the child's understanding of quantity, weight and volume appears in a sequence.
   b. Stage-development conceptualizations can be used in the evaluation of intellectual ability.
   c. Child-rearing communications can be viewed in relation to the child's developmental stage, and techniques employed which are consistent with it.

C. Basic Principles of Language Development.

1. The stage of prelinguistic vocalizations include the areas prior to utterance of the first word.
   a. The earliest vocalizations include fussing, crying, and cooing and tend to occur in distinctly different situations.
   b. Babbling represents a later stage in which cooing begins to sound like human speech.
   c. There are several factors influencing language development:
      (1) Increasing cortical control has a direct influence on increased fine muscle control.
      (2) Vocalizations come increasingly under the control of social reinforcement.
      (3) Comprehension of adult speech occurs before it can be utilized.
2. Semantic development focuses on the eventual verbalization of an individual's conceptual system.
   a. The meaning of early utterances is not very well related to adult categories and is relatively fluid.
   b. Vocabulary increase is dependent upon increases on the number of items known, on the ability to differentiate categories, and on the increase in understanding of the complex nature in hierarchical and relational structures.
   c. The structure of meaning is dependent on the ways in which culture defines significant communications.
   d. Vocabulary items change in their relation to each other with increasing complexity of syntax.
3. The influence of language on cognition is pointed to as a basic distinguishing factor between man and lower animals.
   a. Little evidence exists to support the notion that language training effects perceptual development.
   b. Labelling categories produces more accurate recognition.
   c. Verbal mediation refers to internal verbal responses which tend to direct motor behavior.
   d. Age serves to change both verbal skills and other cognitive elements.

4. Discussions of language function include sociological, psychological and stylistic aspects.
    a. Early speech functions include expressive features, vocal play, and action accompaniments.
    b. Language may be used to request services, objectives, and information.
    c. Routine elements include greetings, thanks, etc. which are highly restricted and situational.
    d. Social reinforcement and demand for speech is high from the start.
    e. Information-offering represents a relatively mature speech function.
    f. Linguistic form and function increases as it is employed in a greater variety of settings.
5. Language function varies as a result of several factors:
    a. Sex factors determine relatively small parts of functional variations.
    b. Multilingualism is important element in the variation of function.
    c. Caste and class lines lead to the establishment of dialects in in different communities.
    d. Cultures vary in the functions and values attached to language.
6. Research evidence related to language training suggests that:
    a. It is important to have early sensory stimulation in order to facilitate cognitive development.
    b. Divergences between classes increase with age, suggesting the importance of extensive compensatory nursery school training.

D. Factors Related to Mental Retardation.

1. The decision concerning an individual's retardation is often based not upon intellectual considerations, but rather upon legal, occupational and social adjustment criteria.
2. Social adequacy determinations of retardation are arbitrary.
3. There is little agreement as to the nature of intelligence.
    a. Certain investigators concentrate on the nature and development of cognitive processes i.e., thought, memory, reasoning, and concept formation.
    b. Psychometric formulations indicated that the nature of intelligence could be understood by examining the qualities of the tests which were designed to measure it.
    c. The emphasis on social competence similarly resorts to content definitions rather than attempting to identify the underlying cognitive processes.
4. The nature-nurture issue centers about innate vs. environmental aspects of intellectual development.
    a. The intellectual capacity concept conceptualizes human beings as biological organisms who are innately different.
    b. Environmentalists accept the importance of biological capacity, but treat human behavior as a function of experience.
    c. Research indicates that inherited intellectual elements are important factors in cognitive development.

5. *The difference orientation* attempts to establish that all retardates suffer from a specifiable defect.
    - a. Luris has pointed to the major defect in retardates as an underdevelopment of the verbal system, and a concomittant dissociation from the motor system.
    - b. Spitz' cortical satiation theory points to a basic defect in the electrical, chemical, and physical changes in the cortical cell.
    - c. The Lewin-Kounin theory proposes that the retarded child has a less differentiated cognitive structure--ie., there are fewer cognitive cells or regions than there are for a normal child.
    - d. Ellis' Stimulus Trace theory views retardation as a result of central nervous system pathology.
    - e. Zeaman and House indicate that the retardate is defective in his ability to attend to relevant stimulus dimensions and cues.
6. Many of the reported differences between normals and retardates are a result of motivational and emotional factors.
    - a. Considerable evidence exists which stresses the importance of anxiety on performance.
    - b. Much of the depressed performance of the institutionalized familiar retardate is a function of severe preinstitutional social deprivation.
    - c. Another factor which seems to influence the performance of the retarded is their high expectancy of failure.
    - d. The effects of institutionalization on behavior are considerable.

II. SOCIAL LEARNING AND PERSONALITY DEVELOPMENT

A. Basic Principles of Social Learning

1. Learning may occur through observation of a model even though the observer does not replicate the behavior and, thus, is not reinforced.
2. Patterns of reward with imitative behavior often come through the model.
    - a. Vicarious reinforcement refers to the modification of behavior due to reinforcement of the model.
    - b. Reward by the model is important provided that he exhibits socially effective behavior.
3. Generalization refers to the tendency to generalize learned response patterns to situations other than those in which they were learned.
    - a. Generalization is a function of the degree of similarity between the original learning situation and the novel one.
    - b. Maladaptive behavior may occur when generalizations are made on the basis of irrelevant cues.
4. Effective social training includes the establishment of fine discriminations.
5. Social training inevitably involves the suppression or responses.
    - a. Much socialization comes about through the reward of socially appropriate behavior and the *nonreward* of alternative responses.
    - b. Punishment involves the use of painful stimulation to obtain response inhibition.

    - c. Research indicates that nonreward usually results in the elimination of responses, whereas punishment tends to suppress rather than eliminate them.
  - 6. Pairing noxious stimulation with social responses which an individual is strongly disposed to make results in approach-avoidance conflict.
    - a. The conflict may result in the displacement of the response to a new target.
    - b. Conflict outcome is dependent upon the relative strengths of the approach and avoidance responses.

B. Biological and Constitutional Factors.

  - 1. Type and timing of physical characteristics help determine patterns of social reinforcement.
  - 2. Genetic factors set limits on intellect development.
  - 3. Innate constitutional characteristics may influence child-rearing practices.

C. Influence of Imitation, Identification and Role Playing.

  - 1. The cultural importance of observational learning has been emphasized by authropologists.
    - a. Symbolic models may be presented through oral or written instructions, or through pictorial devices.
    - b. Several theories of imitation have been developed over the years.
      - (1) Miller and Dollard stress the importance of a motivated subject who receives positive reinforcement for replicating correctly a model's responses, during a series of initially trial-and-errors- responses.
      - (2) "Higher-order" vicarious learning assumes the results of the model's behavior can arouse in the observer the expectation that he will experience analogous results for similar activities.
      - (3) Acquisition of imitative responses can be viewed as resulting primarily from the cintinuity of sensory events.
  - 2. The characteristics of the observers influence the extent to which they imitate others.
    - a. Highly dependent individuals are particularly prone to the imitation of successful models.
    - b. Individuals low in self-esteem or competency will similarly be more prone to imitation.
    - c. Observers who consider themselves to be similar to the models are more likely to match other of their responses to those employed by the model.
    - d. Physiologically or hypnotically induced arousal can also increase the degree of matching behavior
  - 3. Role-playing may be a particularly effective method of changing behavior since the player dependently accepts the task and is then usually reinforced for producing the desired behavior.

4. Identification tends to be a term which refers to the intrafamilial dynamics which determine the extent of imitation of the same-sex and opposite-sex parents.
    a. Psychoanalytic theory has provided an elaborate explanation of the identification process.
        (1) Anaclitic depression is used to describe the situation in which a child "introjects" parental behaviors due to a threat of a loss of love.
        (2) Defensive identification refers to the notion that fear punishment provides the primary incentive for a boy's identification with his father.
    b. Mowrer has emphasized the role of positively conditioned proprioceptive feedback.
    c. Some theorists indicate that the controller of resources will be the main model for children's imitative role-playing.
5. Research evidence indicates that:
    a. When a model is supplied, patterns of behavior are usually acquired in large segments rather than through slow, gradual processes.
    b. Aggressive responses on the part of the model result in childhood responses of aggression in subsequent frustrating experiences.
    c. The presentation of models may have inhibitory or eliciting effects on observer's behavior.
    d. The influence that the behavior of the model exerts depends upon the consequences of the model's responses.

D. Deviant Behavior.

1. Persistent antisocial behavior is seen to result from intermittent positive reinforcement.
2. The persistence of anxiety-motivated avoidance responses is attributed primarily to the intermittent occurrence of reinforcement through the reduction of anxiety.

E. Basic Principles for the Modification of Behavior.

1. Extinction refers to the elimination of troublesome behavior which is persistent.
    a. Where behavior is maintained by positive reinforcement, simple withdrawal of the reinforcer may be sufficient.
    b. Reduction of anxiety responses may need to occur before appropriate approach responses can occur.
2. Counterconditioning involves the elicitation of responses--i.e., relaxation, that are incompatible with anxiety or fear, in the presence of the fear-arousing stimuli.
3. Positive reinforcement includes operant conditioning and other techniques which rely heavily on reinforcement.
    a. These methods are especially effective where behavioral deficits are involved.

        - (1) These procedures have been employed to shape and maintain reality-oriented behavior in adult psychotics.
        - (2) Autistic children have similarly been able to exhibit reality-oriented behaviors with this technique.
    - b. The procedure increases the probability of the occurrence of classes of verbal responses.
    - c. Methods may be particularly effective with undersocialized, aggressive individuals.
- 4. Social imitation is of considerable importance in the acquisition of social behavior.
    - a. Fear-reduction has been produced by having other children act nonanxiously in the presence of the feared object.
    - b. Modeling techniques have been shown to be capable of reinstating verbal behavior in psychotic patients.
    - c. Effectiveness has been demonstrated with over-inhibited children.
    - d. Concentration may be on shaping prosocial responses which are compatible with socially acceptable behavior.
- 5. Discrimination learning focuses on changing overgeneralized habits learned in childhood.

F. Family Structure, Personality, and Socialization.

- 1. The structure of the family reflects various aspects of the economy, religious beliefs and other values held in society.
    - a. Membership composition in the United States typically consists of the nuclear family--i.e., the husband, wife, and children.
        - (1) The number, spacing, and sex of the children is the most common source of variation in family composition.
        - (2) Another frequent source of variation in composition comes through death or divorce.
    - b. Role relationships are rather explicitly defined for the family member.
    - c. Parental personalities and values influence the structure in a unique fashion.
- 2. The process of socialization involves the means through which the infant and child is led to take on the ways of life of the family and larger social groups.
    - a. Of initial importance is the nurturance and protection necessary to insure the survival of the infant.
    - b. Aggressive and impulsive behavior must be brought under control
    - c. Physical cognitive and social skills are developed and will depend greatly on parental attitudes, goals, and values.
    - d. The acquisition of language and development of a sense of self is crucial in the process of becoming an independent person.
    - e. Socialization is a cumulative process which must be coordinated with the child's particular level of development.
- 3. Family composition is typically one of the nuclear family in most urban, industrial societies.

a. Family involvement of relatives other than the parents will have disturbing influence where there is little harmony between the generations.
  (1) The child exposed to contradictory demands from parents and other relatives will typically manifest anxiety and confusion.
  (2) Long-lasting close relationship with adult relatives can serve as ego-enhancing and stabilizing influence on the child.
b. The effects of family size is interwoven with effects of more general social characteristics and of particular motivations.
c. Research evidence on family size suggests that :
  (1) Parents tend to be increasingly authoritarian as family size increased.
  (2) Parents in larger families were more likely to use physical punishment rather than symbolic rewards as a control technique.
  (3) Parents with only one child tend to be less close to each other as compared to those who had several children.
  (4) Children from smaller families show higher achievement motivation and academic performance.
  (5) Children from smaller families tend to make higher scores on intelligence tests.
  (6) School adjustment does not appear to be any better for children of large families.
d. Birth order may tend to have certain meanings and consequences. Research on this aspect of family structure indicates that:
  (1) First-born children tend to speak earlier and more precisely.
  (2) First-borns are typically smallest at birth but become consistently heavier and taller than later born children.
  (3) With larger families the father tends to play a relatively greater authority role with the older children, and the mother tends to be more closely involved with the youngest.
  (4) The youngest child is less likely to be spanked than is a first-born child of the same age.
  (5) First-born children achieve eminence in higher proportion than do their siblings.
  (6) Later-born siblings are often characterized as sociable approachable, and comfortable with peers, while first-born and only children are described as having greater difficulties with peer relations.
  (7) The first-born child tends to exhibit more persistent patterns of anxiety and dependency.
e. Families broken by death, divorce or separation have profound effects on personality and family structure, evidence in this area proposes that:
  (1) The consequences for the child's mental health (of being reared by a single parent) are not as great as might be assumed from studies of temporary problems.
  (2) Children from broken homes generally fare better than those from unhappy broken homes.

4. The structure of family relationships are defined normatively or ideally by the cultural conceptions of what a family should be.
    a. Parental excercise of power is a variable which depends on many factors; research suggests that:
        (1) Authoritarian parents tend to have children less highly motivated to achieve and to continue their education.
        (2) Maternal dominance tends to be associated with psychopathology, especially for boys.
    b. The maintenance of the family depends upon the assignment of role functions.
        (1) The mother is the primary agent of both instrumental and affective role behaviors.
        (2) The father functions in primarily economic or task-related roles.
5. Parental personalities and values have a potent influence on the child's personality development.
    a. Middle-class parents emphasize future, orientations, achievements, competition, curiosity, happiness, consideration, and self-control.
    b. Working-class parents tend to stress obedience, neatness, cleaniness, and adherence to externally imposed rules.

G. Social Structure in the Classroom

1. The development, stability and composition of the group represent some major aspects of social structure--the indications are that:
    a. Classroom structures develop quickly remain relatively stable and produce rather accurate perceptions by members as to their own position in the structure.
    b. Structures are usually comprised of stable pairs with a few isolates.
    c. Members can be differentiated with respect to emotional acceptance, perceived competence, and social power.
2. The teacher has great social power in the classroom--research evidence suggests that:
    a. The relationship with the teacher is important in affecting academic achievement.
    b. Delegation of teacher power has marked effect on classroom organization.
        (1) Pupil-to-pupil interaction is stimulated.
        (2) Mutual esteem, self-esteem, and rapport is enhanced.
        (3) Interpersonal conflicts and anxieties are reduced.
        (4) A wider dispersion and flexibility of peer social power is induced.
        (5) There is an increase in moral responsibility, self-initiated work, and independence of opinion.
3. The social class of students and teachers and the mobility of the family also influences the structure of the class.
    a. Children tend to be attracted to other children who fall either in their own or higher social classes.

   b. Children in higher classes tend to be better liked and more respected in competence and power.
   c. Social and spatial mobility seem to reduce the acceptance of children.
   d. Social-class discrepancies between pupil and teacher seem to interfere with rapport.
4. A child's personal attributes influence his position in the classroom structure.
   a. Presence of overt physical handicaps tends to limit acceptance and social power.
   b. The utilization of intelligence has been found to be positively related to acceptance and power.
   c. Position in the classroom structure is significantly related to mental health--the greater the disturbance, the lower one's social acceptance.

H. Patterns of Adjustment in Adolescence.

1. Sexual and psychic maturation at adolescence generate the central developmental
   a. On the average, boys begin sexual maturity only shortly after girls, but take longer to reach maturity.
   b. Most adolescents continue to improve their intellectual performance.
2. Family roles change since the adolescent needs to detach from the family and develop, with the aid of the peer group, a unique set of values and behavior controls.
   a. The model pattern is not one of acting out or suffering strains and conflicts, but rather the bid for autonomy occurs gradually and appropriately.
   b. The role change is from dependent child to independent adult autonomy.
   c. Children shift companions more easily than they abandon emotional ties to the parent.
   d. Autonomy is supported and encouraged by parental warmth and concern, democratic controls, and consideration and consistency in rule enforcement.
3. Friendship and peer relations are established because the adolescent needs an authority to substitute for parental authority as he works through internalized controls.
   a. Guilt induction is not a central mechanism of control as it is in the family.
   b. Friendships demand sensitivity and permit experimentation with new behaviors and new self-images.
   c. Social class and neighborhood are important elements in friendships.
   d. Peer groups assume different functions for boys and girls.
      (1) Boys are supported by the group in their move toward independence, and reciprocate with loyalty.

        (2) Girls are less challenged by strivings for freedom and have less need for group support; therefore, they tend to look at the group as a place to find close dyadic relationships.

    e. Dating serves as a means to gain increased status and acceptance in the peer group.
    f. There is increased seriousness and significance given to the adolescents' role as a student, a worker, and a citizen.
    g. One of the most crucial tasks during this period centers about stable patterns of self and identity.
        (1) The adolescent's self-concept is subject to radical and rapid alterations as a function of external social cues.
        (2) Sex-role tends to represent the core of the adolescent's identity--with adequate sex-identity essential to the adolescent health.
        (3) Self-esteem mainly depends on the evaluation of significant others, the standards of the reference group, and the effectiveness in achieving goals.
        (4) Girls derive a sense of self-esteem through social, interpersonal adequacy.
        (5) Boys establish self-esteem through direct sexual expression. independence, intellectual ability, competence, and leadership positions.

III. THE MOTIVATIONAL PROCESSES.

A. Motivation Viewed as Homeostasis.

1. The concept of homeostasis has been used to describe the steady state of physiological processes in an organism, and has also been applied to philosophical, social and psychological states as well.
    - a. Physiological Homeostasis conceives of the organism as a biological system in contact with the external environment which maintains its own internal environment.
    - b. Psychological Homeostasis attempts to include concepts explaining personality traits, acquired action tendencies and habits, and drives related to interests.
    - c. Social Homeostasis attempts to extend the concept to the social unit--the relationships between individuals in the unit are case in terms of their contributions to the larger system, and lend to its equilibrium.
    - d. Research Evidence.
        - (1) Surgical removal of physiological regulators caused animals to attempt to maintain a constant internal environment.
        - (2) The maintenance of stable percepts (e.g. brightness, color, form, and size) and organization of perceptual fields into good "Gestalts" lends some support to psychological homeostasis.
        - (3) Fairly constant performance levels tend to be maintained under conditions of tension.

(4) "Zeigarnik effect"--found that interrupted tasks serve to motivate resumption and success.

(5) Psychological defense mechanisms point to the homestatic nature of these response patterns.

2. Several models have emerged which attempt to describe motivation in terms of homeostatic constructs.

a. G.L. Freeman's approach is an evaluationary one in which all behaviors are seen as instances of neuromuscular homeostasis and related to the limited organ reactions.

b. Helson's "Adaptation Level" theory attempts to explain perceptual activities within the context of homeostasis.

c. Wiener's cybernetics model devotes itself to the study of control devices and communication based on the feedback of information. Survival is seen as a successful adaptation of the organism to the varied environment with which it interacts, and is dependent upon the maintenance of stability.

d. Lewin's field theory is based on homeostatic principles and has significantly influenced personality study and educational psychology.

B. Frustration Conflict and Stress are extreme conditions which give rise to or occur simultaneously with states of motivation.

1. Frustration refers to a single occurrence or repeated instances of inability to carry some course of action through to its goal or conclusion.

a. Conditions which give rise to frustration include the presence of aroused but unsatisfied motives and the interference with means of satisfaction.

b. Developmental aspects center about crisis situations at various life stages which may drive to generate frustration.

c. Frustration is viewed as a drive in different respects:

(1) The Brown-Farber theory attempts to explain frustration in terms of drive and habits.

(2) The Amsel theory indicates the importance of nonreward following the expectation of reward.

d. Reactions to frustration might include aggression, regression, repression or fixation.

2. Conflict tends to refer to that situation in which two incompatible action tendencies exist simultaneously.

a. The major source of conflict occurs when the satisfaction of one motive prevents the achievement of another.

b. Conflicts are of four main types, approach-approach, avoidance, approach-avoidance and double-approach avoidance.

c. Conflict serves as a drive state in which there is "a kind of pervicious homeostasis." (Brown)

3. Stress is a term commonly used in physiology and psychology to refer to the condition of the body under strain.

a. Systemic stress results as a function of the inability of the normal processes of homeostatic adaptation to redue or elminate distressing agents.

    b. Psychological stress is a broader term, which includes systemic stress and is used to describe the state of the organism as a result of its interaction with the environment.
4. Research evidence seems to indicate:
    a. Frustration occurs in only those cases in which the goal interfered with is considered important and attainable.
    b. Task-oriented groups are more likely to recall interrupted tasks.
    c. Life-threat and threat to social status could induce systemic stress symptoms.
    d. Stress reactions have often been found experimentally to be a result of psychological unpreparedness.

C. Types of Human Motives.

1. Several authors view anxiety as the basic motive underlying many other motive states.
2. Achievement has been extensively investigated as a drive.
3. Affliation has been similarly identified as a motive.
4. Projective devices have pointed to power as a strong human need.
5. Fear is seen to serve as a motivating element.
6. Arousal of the sex need has been shown to have a great affect on fantasy
7. Aggression has been conceptualized in many ways:
    a. Freud viewed aggression as an instinct.
    b. Aggression is often viewed as a reactive process; frequently as a reaction to frustration.
    c. Aggression is seen by some as an acquired drive.
8. Dependency is frequently seen in clinical discussions as playing an important role in the motivations of adults and children.
9. The role of experience is crucial in the understanding of the development of motivational factors.
10. Research evidence has shown that:
    a. Attention-seeking behavior is greatest under conditions of social deprivation.
    b. Anxiety leads to affiliative behavior.
    c. Dependency phenomena have their correlates in the home environment, and find little support for it status as a drive or motive.
    d. Aggression operates as a drive when accompanied by anger.
    e. The achievement motive is related to other behaviors in a complex manner which involves not merely the achievement motive but also the qualities of the situations and performances in which it is aroused.

D. Basic Principles of Social Motivation.

1. Incentives are objects or situations which are employed to arouse the motivation to perform.
    a. knowledge of results provides some standard through which an individual can judge his present performance against past performance, performance of others, or some established standard.

    - b. The Level of aspiration is a procedure in which the individual is asked to indicate what his performance will be on the succeeding task.
2. Social factors such as partnerships, cooperation and competition influence human performance.
3. Social processes such as group standards, attractiveness, and cohesiveness modulate the motivational patterns of its individual members.
4. Conformity to group norms can change ways of acting, thinking and believing.
5. The issue of whether or not social situations create motivational states needs to be considered.
    - a. group goals and motives have been shown to be established and function in a fashion similar to the way in which they do for individuals.
    - b. motives can be induced with task acceptance and the beginning of work upon it.
    - c. ego-involvement is seen as another externally induced
    - d. uncertainty can affect the vulnerability of motive states--this may be high for those with little confidence.
6. Research evidence indicates that:
    - a. Knowledge of results creats better future performance than no such knowledge.
    - b. Successful performance lends to increased levels of aspirations..
    - c. Competitive work situations may increase the speed or quantity of work but not necessarily the quality.
    - d. Subjects needing social-approval yield more readily to the group than do those with low social-approval needs.
    - e. Subjects with a high need for achievement and/or low anxiety tend to improve performance under threats to status or identity, whereas the performance of highly anxious or low need achievement subjects under similar conditions is adversely affected.
    - f. Adverse effects on task retention has been found after failure on a second task.

E. Self-Actualization as a Source of Motivation.

1. Existentialism arose out of the collapse of religion--it emphasizes the transitory nature of man and his institutions, and denies the supremacy of reason.
2. Self-actualization is similar to existentialism, but it is more interested in the conditions which tend to motivate human beings.
    - a. development of an emphasis on self-actualization emerged from:
        - (1) The turning away from the reductive analytic, monothetic procedures of natural science.
        - (2) The rejection of the notion that man is basically motivated by irrational, instinctual urges.
        - (3) The influence of cultural anthropology which directed attention toward the environment and away from biological considerations.

b. Human nature is basically good and rational, but is distorted by the effects of his environment.
c. The characteristics of the self-actualized person varies among different theorists:
    (1) Fromm describes the "orientation" a man's conduct may take, as determined by his society.
    (2) Naslow describes characteristics in terms of perceptual efficiency, self-acceptance, problem-centering and autonomy; he describes a hierarchy of needs, with self-actualization at the top.
d. Self-actualization is limited due to societal interferences or because of the dominance of lower-order needs which remain unsatisfied.
e. Self-actualized individuals are charcterized by growth-motivations rather than deficiency motivation.

F. Motivation as Related to Learning.

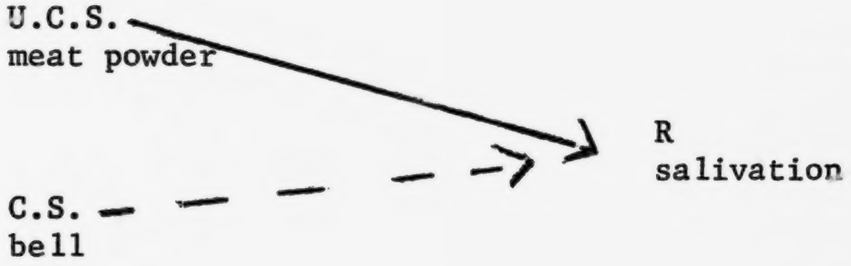
1. Sharp distinctions have been made between the learning of habits and the performance of habits.
2. Hull's contention is that drive states act like stimuli, and that there is a general drive state to which any drive may contribute
3. The total potential of a reaction is a function of habit, incentive, drive, and stimulus intensity.
4. Motivation accounts for selective learning--such motives have been described by Spence as "primary appetitional" or "primary aversive" needs.
5. Two formulations are presented to attempt to explain how incentives operate in motivational fashions:
    a. Incentives are seen to produce conflict and hence result in heightened tension or excitement.
    b. The intensity of the incentive is seen to provide an internal stimulus dynamism which varies as a function of the different intensity of external stimulation.
6. Anxiety or fear has come to be used by Mowrer as representing a warning cue of danger or pain--fear is seen as a learned reaction and is a highly general basis for motivation.
7. Widespread rejection of instinct as a basis for motivation led to alternative explanations.
    a. Drive theory employed the concepts of acquired drives and incentives as alternatives for instinct.
    b. Some drive theorists regard anxiety as the underlying force to other learned motives.
        (1) Fear responses once learned may energize other responses.
        (2) Escape and avoidance training has similarly been used to describe
        (3) Punishment serves to suppress responses and these effects have been described by Estes as a result of anxiety states.
8. Cultural variations have profound effects on the acquired drive states of human beings.
9. Class membership is a further condition which determines variability in motivational characteristics.

10. The concept of functional autonomy of behavior is a further attempt to establish a noninstinctual source for those motivational processes which do not represent basic, biological drives.
11. Research evidence indicates that:
    a. For instrumental responses, measures of rate or speed vary positively as a function of the strength of the drive to achieve the goal.
    b. Errors tend to decline and correct responses rise with an increase in aversive stimulation, up to a point, and then reverse themselves with additional aversive stimulation.
    c. Animals under low drive strength seem to be more receptive to internal and external stimuli than do animals under high drive states.
    d. Results contrary to tension or drive reduction theory have emerged--opportunity to explore and receive visual stimulation is in itself rewarding, as is electrical stimulation in certain areas of the brain.
    e. Incentives probably have a greater effect on performance rather than on habit strength.

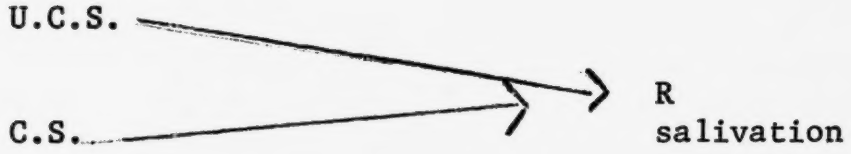
IV. FORMAL ASPECTS OF LEARNING

A. Respondent Conditioning (Also Known as Pavlovian and Classical Conditioning)

1. Basic Description and Paradigm
    a. Preconditioning Phase



Following Respected Pairings.



2. Essential characteristics.
    a. The existence of an unconditioned stimulus (U.C.S.) which will reliably elicit some response (U.C.R.)
    b. The U.C.S. and C.S. must occur in close temporal contiguity.
    c. Repeated pairings are almost always necessary for conditioning to occur.
    d. The conditioned response (C.R.) is similar but not equivalent t the unconditioned response (U.C.R.)
3. Respondent conditioning may be divided into the following subclasses:

   a. Pavlovian A--Involves voluntary responses and is easily extinguished--e.g., dog salivating to bell.
   b. Pavlovian B--(Watoonian)--Involves involuntary respones (usually emotional) and is not easily extinguished--e.g. infants' emotional response to a rabbit following repeated pairings of a rabbit (C.S.) and a loud noise (U.C.S.)
   c. Anticipatory Instructed Conditioning--Individual instructed to make a voluntary response (U.C.R.; e.g., buzzer). Following repeated pairings, a second stimulus (e.g., change in room illumination) which is presented prior to the onset of the U.C.S. begins to function as a signal for the individual to produce the U.C.R.
   d. Sensory Preconditioning--Two stimuli are repeatedly paired prior to conditioning. A response is then conditioned to one of these stimuli. Following this conditioning, the second stimulus may also elicit the response even though it has never been paired with the unconditioned stimulus.

4. Fundamental Concepts Associated with Respondent Conditioning include:
   a. Extinction--Repeated presentations of the C.S. in the absence of the U.C.S. eventually reduce the strength of the C.R. to its preconditioning state.
      (1) Counter conditioning--a form of extinction in which the C.S. is immediately and directly paired with a new U.C.S. which yields a U.C.R. which is incompatible with the original U.C.R. (e.g. sight of a fear object paired with eating one's favorite food.
      (2) Desensitization--a form of extinction in which the C.S. is gradually introduced so that it eventually becomes paired with a new UC.S. (e.g., displaying a feared object at distances which become closer and closer to the individual.
   b. Spontaneous Recovery--The return in strength of a conditioned response brought about by a lapse of time following its diminution by extinction.
   c. Higher-Order Conditioning--That conditioning which occurs when a C.S. which has come to reliably elicit the C.R. views previous conditioning functions as a U.C.S. in further conditioning trials
   d. Stimulus Generalization-- A conditioned response which has been formed to one conditioned stimulus may also be elicited by other stimuli which have not been used in the course of conditioning, but which are somehow similar to the original conditioned stimulus. The degree of generalization varies inversely with the distance of the S. and the C.S. from each other along some dimension.
      (1) Two types of generalization:
         (a) Primary--based upon a physical similarity between the two stimuli (e.g. pitch or loudness of tones.)
         (b) Mediated (or secondary)--based upon an equivalence of the responses which the two stimuli evoke. The equivalence has been learned. e.g., "democracy" and "truth".
      (2) Generalization gradient--The function expressing the relationship between stimulus similarities and strength of the response.

    c. Response Generalization--Following the conditioning of one response, other responses may be elicited by the same conditioned stimulus, although there has been no specific training to establish a relationship between this stimulus and these responses, (e.g., dog lifting right foot when conditioned left foot held down.)

5. Knowledge of Respondent Conditioning will Contribute to a Teacher's Understanding of:
    a. How fears are acquired and how these may be eliminated, through extinction and counter conditioning.
    b. How meanings to words are established. (Osgood)
    c. How secondary reinforcers are established.

B. Operant Conditioning (Also Known as Instrumental and Skinnerian Conditioning).

1. Basic Description and Paradigm.

$$S^D \longrightarrow R \longrightarrow S^R$$

2. Essential Characteristics.
    a. Responses are voluntarily emitted and are not necessarily correlated with a specific stimulus.
    b. The relevant response must be within the repertoire of possible responses of the learner.
    c. Temporal Contiguity-- Reinforcement must closely follow the occurrence of the desired response.
3. Operant Conditioning May be Divided into the Following Subcategories.
    a. Reward Training--Involves the use of a positive reinforcer, the probability of an operant response, (e.g. food and water.)
    b. Escape Training--Involves the use of a negative reinforcer, i.e., a stimulus which when removed from a situation, strengthens the probability of an operant response.
    c. Avoidance Training--A procedure in which the learned movement circumvents or prevents the occurrence of a noxious stimulus. The signals learners use to predict an aversive situation are called preaversive stimuli.
        (1) The effects of reward, escape, and avoidance training are highly similar; namely, an increase in the probability of occurence of the operant response.
        (2) Successful escape and avoidance behaviors are hard to extinguish.
    d. Punishment (1)--Involves the presentation of negative reinforcer following the occurrence of an operant (usually undesirable response.
    e. Punishment (2)--Involves the withdrawal of a positive reinforcer following the occurrence of an operant (usually undesirable.)
        (1) The general effects of punishment.
            (a) Does not act as a negative reinforcer; leads to a temporary suppression of the behavior rather than a reduction in the total number of responses during extinction. The response will reappear when the punishment stops, or the punishing agent is removed.
            (b) These effects are usually attributed to two sources:
            --creates an emotional state which depresses operant respones while the state is aroused.
            --withdrawal responses are positively conditioned by the cessation of the negative reinforcer.

- (2) Punishment usually arouses a generalized emotional state which will suppress other responses in addition to the one which is punished.
- (3) Punishment is most effective for behavior change if there is an alternative response.
- (4) If punishment is severe, there is little recovery; if punishment is given without an opportunity to escape, the response is repeated compulsively.
- (5) If punishment is mild, suppression is brief.

4. Characteristics of Reinforcers.
   - a. The nature of reinforcement.
     - (1) Thorndike's Law of Effect--responses which have satisfying consequences are strengthened and those followed by discomfort or annoyance are weakened.
     - (2) Hull's Need Reduction Theory--reinforcement is the result of a reduction of a biological need.
       - (a) Neither of the above views can adequately account for incidental or latent learning. Learning which apparently occurs without reinforcement as conceptualized by Thorndike or Hull. (e.g. animals who have previously been allowed to explore a maze take fewer test trials to run the maze for some reward than animals who lack this previous experience.)
       - (b) These views have also been challenged by a series of experiments designed to show that learning takes place when drive reduction is ruled out. Examples include:
         --hungry rats may be instrumentally conditioned with saccharine as the reinforcer.
         --rats press a key which sends electrical charges to their brains at the rate of hundreds per hour. When the current is off, the rate of pressing is zero.
     - (3) Stimulus change or environmental control. View the above evidence opposing the drive-reduction theory suggests that the addition of a stimulus may be reinforcing.
     - (4) For humans, reinforcement is rather subjective in nature. What each individual expects the consequences of his behavior to be, (on the basis of past experience), multiplied by the value of that consequence, will determine the likelihood that the response will be repeated. Thus, reinforcing properties do not lie within a stimulus but in the stimulus' effect on behavior.
   - b. Reinforcers may be classified as:
     - (1) positive vs. negative (See section "3" above)
     - (2) primary vs. secondary
       - (a) A primary reinforcer is a stimulus with innate reinforcing properties (e.g. food, water, shock, etc.
       - (b) A secondary reinforcer is a stimulus which derives its reinforcing properties from prior conditioning in which it has been associated with a primary reward.
         --secondary reinforcers acquire their properties

through respondent conditioning.
--some secondary reinforcers (generalized reinforcers) tend to accompany a variety of primary reinforcers and, therefore, have widely generalized properties (e.g.s. money, praise, affection, etc.)

c. Schedules of reinforcement

(1) Continuous reinforcement--occurs when every emitted response is reinforced.

(a) Leads to rapid acquisition of the response and should, therefore, be used during initial stages of conditioning.

(b) Responses are easily extinguished.

(2) Intermittent or partial reinforcement--occurs when some emitted responses are reinforced while others are not.

(a) Resistant to extinction and should, therefore, be used to maintain a response once it has been established.

(b) May be further divided into several subcategories, including:
--fixed-interval schedule: reinforcement occurs for the first reinforcement after a certain amount of time following the preceding reinforcement.
--variable-interval schedule: reinforcement occurs irregularly, but on the average after a certain amount of time.
--fixed-ratio schedule: reinforcement occurs regularly on every "nth" trial.
--variable-ratio schedule: reinforcement occurs irregularly, but on the average after "n" responses.

(3) Intermittent schedule yield characteristic response patterns which vary in:

(a) rate.

(b) uniformity.

d. Delay of reinforcement.

(1) In general, the closer reinforcement follows the occurrence of the operant response, the greater its impact on the strength of the response.

(2) Individuals vary in their tolerance for delays in reinforcement (e.g., low-motivated students have lower tolerance for delay than high-motivated students.)

5. Fundamental concepts associated with respondent conditioning include:

a. Extinction--a process in which reinforcement is withheld on a noncontingent basis, i.e. response yields neutral stimulus. Eventually reduces strength of the response to its predonditioning or operant level.

b. Discrimination learning.

(1) Involves differential reinforcement, i.e. reinforcing the response in the presence of one stimulus situation (S^D) and not reinforcing it in the presence of other situations. (S)

(2) Results in a differential response, i.e. response is maintained in presence of S^D and decreases in presence of the S.

c. *Shaping* (also known as response differentiation).
(1) Involves reinforcing successive approximations to the target behavior.
(2) Starts with behavior that is already present (e.g. questions a student can already answer.
(3) Gradually results in more complex or sophisticated responses--ultimately, in the target behavior itself (e.g. sophisticated answers to more difficult questions.)

d. *Chaining*.
(1) A sequence of behavior in which one response produces a stimulus change which increases the probability of occurrence of another response which, in turn, produces another stimulus change--the sequence eventually leading to reinforcement.
(2) The response produced stimulus acts as a reinforcer of the response that it follows and also as a discriminative stimulus for the response it preceeds.
(3) Examples include: driving a car; playing a piano, etc. Thinking might be viewed as a reasoning chain.

6. Relevance of operant conditioning to classroom teachers

a. Knowledge of instrumental conditioning is a *definite aid to a teacher's understanding of*:
(1) Language development.
(2) Programmed instruction.
(3) The nature of superstitious behavior.
(4) Acquisition of concepts.
(5) The potential control of human behavior.

b. Eliminating (changing) undesirable classroom behavior.
(1) *Through extinction*-- withholding reinforcement.
(a) Problems which will be encountered include:
--Avoiding subtle forms of positive reinforcement (e.g. any form of verbal response may satisfy a student's need for attention.
--Responses which have been established through intermittent reinforcement or through escape and avoidance training are difficult to extinguish (e.g. cheating and school drop-outs.)
--Teacher may be discouraged by the initial rise in rate of response and emotional behaviors which often occur during early extinction trials.
(b) If effective, however, will permanently eliminate the behavior.
(2) *Through satiation*--continual reinforcement decreases reponse strength. (e.g. force youngster who smokes to to chain smoke two packs of cigarettes.)
(3) *Through punishment*--withdrawal of a pleasant stimulus or the presentation of an aversive stimulus.
(a) Problems which will be encountered include:
--Punishment leads only to a temporary suppression of the punished behavior.
--Usually arouses a generalized emotional state

which will suppress other responses in addition to the one punished.

(b) To use punishment effectively a teacher should:
--Use only those forms which are severe enough to produce initial avoidance, without degrading the individual.
--Use punishment to hold a response at low strength while taking the opportunity to teach the appropriate response.

c. Establishing and/or reinforcing appropriate behavior.
  (1) Research regarding schedules of reinforcement suggests that a teacher should.use continuous reinforcement to establish a response and partial reinforcement to maintain it.
  (2) Because one reinforcement is enough to strengthen a response so that it will continue a number of times, a teacher must be careful to reinforce only those responses he wishes to continue.
  (3) Those responses which are initially beyond the capacities of the learner may be established through shaping.
  (4) Research regarding delay of reinforcement suggests that soon after the response occurs, particularly among low-motivated students. Is also a strong argument for programmed instruction.
  (5) A teacher who wishes to establish some complex chain (e.g. Playing the piano, driving a car,) will probably profit from a detailed analysis of the stimulus-response
    (a) Suggests the order in which components should be established.
    (b) Useful in diagnosing learning difficulties.
    Teachers may also find it to their advantage to frequently apply Premack's Principle: given behavior A which is likely to occur and behavior B which you want to occur more often--make the possibility of A's occurrence contingent upon B. (e.g., if Willy enjoys playing ball at recess, but often fails to complete his algebra assignments, make permission for recess contingent upon completion of algebra assignments.)

C. Concept Formation.

1. Basic Description: (Concepts are categories of experience.)
  a. A category is a collection of objects or processes which can be identified by a rule.
  b. A rule is a formula or statement in symbolic form defining the the attributes of the category.
  c. Attributes are the characteristics of a phenomenon; any discernible feature of an event which may vary from event to event, such as shape, size, color, weight, height, length, speed, etc.
    (1) A critical attribute is an attribute or attribute value used as a means of identifying a specific category; an

used to test the relevance or irrelevance of a particular exemplar.
    - (2) An attribute value is a point on an attribute dimension.

2. Every individual has his own subjective categories based upon his experience (e.g., a child in the eastern part of the United States has a somewhat different concept of "my country" from a child living in the southwest.
    - a. Concepts cannot be learned without some relevant experience with the phenomena to be conceptualized. Experience enables the child to make the necessary discriminations.
    - b. The kinds of concepts children develop will be limited by the kinds of experience that are available to them (e.g., attempting to teach concept of "white-collar worker" to youngsters in rural areas.) As a result of having similar experiences, people have similar conceptions.
3. Essential Characteristics:
    - a. Most concepts have:
        - (1) A rule which defines the relevant category (e.g., a horse is a large strong animal with four legs, solid hooves, and flowing mane and tail.) Some rules may not be clear or easily verbalized (e.g., democracy, love.)
        - (2) A set of positive instances or exemplars.
            - (a) Positive exemplars (also called positive instances) Objects which are examples of a particular concept, such as a chair being an exemplar of the concept furniture.
            - (b) Negative exemplars (also called negative instances) or non-exemplars.) Objects which are not examples of a particular category, such as pencil being a negative exemplar of the concept furniture.
        - (3) A name--The symbolic label associated with a particular concept. Not all concepts have names (e.g., not all shades of blue have an associated name.
    - b. An individual demonstrates acquisition of a concept when he can recognize instances of a concept and distinguish them from non-instances with high reliability. Neither naming, nor naming and stating the relevant rule insures that an individual can point out positive instances of the concept, i.e., can make relevant applications.
    - c. Why humans form concepts--Concepts help to reduce the complexities of the environment by the process of abstraction. The complexities are reduced by:
        - (1) Reducing the necessity for constant relearning. (e.g., one does not have to relearn the name "dog" for every new breed
        - (2) Enabling one to order and relate classes of events. (e.g., in order to tighten a bolt, one does not go through a process of trial and error using all the tools he has available.)
        - (3) Enabling one to plan without resorting to physical action (e.g., deciding well in advance to take a long route in order to avoid walking past a vicious dog.)

4. Fundamental processes involved in concept learning.
   a. Concept learning involves finding differences between objects which are exemplars of a particular concept and those which are non-exemplars, and at the same time finding similarities among those objects which are exemplars. It therefore, involves:
      (1) Discrimination (finding differences.)
         (a) Objects which are exemplars serve as positive discriminative stimuli (S^D) for the correct response (category name), while objects which are non-exemplars function as negative discriminative stimuli ($S-$).
         (b) Discrimination usually involves the search for critical attributes. Under these conditions the attributes, rather than the overall objects may function as "S^D's" and "$S\Delta$'s".
      (2) Stimulus generalization (finding similarities).
         (a) Every exemplar of a particular concept is similar, but not identical to, every other exemplar.
            --Share critical attributes.
            --Are different in a number of other attributes (irrelevant attributes) e.g. cows are different colors.
         (b) Thus learner must generalize among exemplars presented in a given learning task as well as to other exemplars he encounters after the initial learning situation.
         (c) Generalization is also facilitated by the search for critical attributes.
         (d) Within the process of concept learning, generalizing may have varied results:

	EXEMPLAR	NON-EXEMPLAR
label with accepted name	correct identification as exemplar	overgeneralization
No label	undergeneralization	correct identification as non-exemplar

         (e) Stereotypes are a special form of overgeneralization.
            --rigid, but inaccurate concepts which are impervious to experience.
            --result from defining first, and observing second.
   b. There are two views of the process of concept learning.
      (1) Behavioral view--Discrimination and reinforcement:
         (a) Description: when a learner responds correctly to a particular object he is reinforced and, therefore, tends to repeat that response in the presence of

the original, or similar, objects. When he responds incorrectly, the response is not reinforced and, therefore, tends not to be repeated. Characteristics that are repeatedly reinforced begin to function as discriminative stimuli for the correct response (concept name.)

(b) This position is supported by studies of the effects of reinforcement on concept learning which will be described in the next section.

(2) Cognitive view--mediation hypothesis:

(a) Mediation is some cognitive process which takes place between the stimulus situation and the individual's response.

(b) Description: Based on attributes of an exemplar, the learner forms a hypothesis as to what the concept rule is. The learner then verifies or changes his hypothesis based on attempts to categorize other instances. The learner changes his hypothesis when it is not verified bacause he finds the consequences of labelling incorrectly, dissonant or in opposition to his beliefs, and, therefore, doubtful and uncomfortable. To restore equilibrium, a new hypothesis is adopted.

(c) This position i supported by studies of dominance level; mediational strategies; and, reversal and nonreversal shifts which will be reviewed in the next section. It is also supported by studies of cognitive dissonance. (Festinger)

5. Variables Which Influence concept learning.

a. Existing factors within the learner.

(1) Concepts which a given youngster can master are apparently limited by his stage of cognitive development. (e.g. youngster's at the concrete operational stage must have concrete illustrations of the relevant concept rather than purely verbal or abstract illustrations.) This tipic is treated in detail earlier in this outline.

(2) Degree of mastery of requisites concepts: A new concept may have attributes which are not known to the learner. Thus, some concepts act as critical attributes for other concepts and must be learned first. (e.g., a horse is a four-legged animal, requires that the learner know the concept "animal." Most new concepts have attributes which represent difficult concepts themselves.

(3) Learning awareness: Contrary to the assumption of most teachers, a child can acquire a concept and still not be able to verbalize it. That is, he may chose exemplars correctly without being able to state the rule.

b. The nature of the concept itself.

(1) Dominance level: The degree to which a concept instance is dominated by a particular attribute. Dominance is measured by free-association to the exemplars of a particular category.

(a) Concepts of high dominance and concepts embeded in instances of high dominance are attained more readily than are those of low dominance.

(b) A high-dominant attribute is more readily discriminated.

(2) Complexity.

(a) Number of irrelevant attributes--The greater the amount of irrelevant information presented along with relevant information, the more difficult it is to attain the concept.

(b) Attribute combinations--Conjunctive concepts are easier to learn than relational concepts which, in turn, are easier than dijunctive concepts.

--Conjunctive: Two or more attributes in common describe the concept; e.g., wooden and square; metal and heavy.

--Relational: Concept described by relation between two or more attributes; e.g., longer than wide.

--Disjunctive: Either one or the other of two or more attributes describes the concept; e.g. wooden or square.

(c) A concept which is very difficult (because it is disjunctive or has many critical attributes) may result in "spectator behavior," i.e. a cease in hypothesis testing.

(3) Reversal and Non-reversal shifts: Young children can make nonreversal shifts more readily than reversal shifts; while older children and adults find reversal shifts much simpler than nonreversal shifts.

(a) Reversal shift--When a concept rule is changed by changing an attribute value along the same dimension (e.g. from large to small.) The characteristic is still relevant but the quantity or quality of the characteristic has moved along the dimension. (e.g. teaching a child a concept in school which differs from his present conception.

(b) Nonreversal shift--A change in a concept rule to a new dimension. (e.g. from size to color.) In this type of shift some previously correct instances according to the old rule may still be positive instances of the new rule. The categorizing and shifting is constantly in process in school. (e.g., "glue" is both a noun and a verb.)

(c) Explanation: Older children and adults think in terms of hypotheses. When a non-reversal shift occurs, and some old instances are still appropriate it is difficult for them to dismiss the old hypotheses. Younger children simply respond to rewards associated with stimuli.

c. The learner's general approach to the task.

(1) *Type of practice:* distributed practice in learning concepts produces faster learning than massed practice, although, retention of the concept is high under both sets of conditions.

(2) *Mediational Strategies*: A strategy is a regular procedure in decision making.

(a) People use strategies in concept learning in order to:

--get the most information in the shortest time.

--control the amount of memory and logical reasonging involved.

--control the degree of chance they take in making decisions.

(b) Due to its heavy demands on memory and inference, a scanning strategy is less effective in concept learning than a focusing strategy.

--*Simultaneous scanning*: learner attempts to use every instance to decide which hypothesis is acceptable and which is not.

--*Successive scanning*: learner tests a single hypothesis. Chooses instance which provides a direct test of the hypothesis.

--*Conservative focusing*: learner uses a positive instance as a focus, tests and alters one alternative at a time. If the instance is positive, the attribute is not a part of the rule; if the instance is negative, the attribute belongs in the rule. Usually the most efficient strategy.

--*Focus gambling*: learner uses a positive instance as a focus, but changes more than one attribute at a time.

d. Instructional strategies.

(1) Reinforcement.

(a) Concepts are learned most rapidly under a 100% reinforcement schedule.

(b) Any delay in reinforcement increases the time required to learn a concept.

(2) Type of instance presented: Exemplars vs. non-exemplars.

(a) Because learning from non-exemplars alone places heavy demands on the memory of the learner, this method of presentation is inefficient and difficult.

(b) However, non-exemplars do have a corrective value, and can serve as a checking device once the student has a reasonably adequate grasp of basic dimensions of the concept.

(c) Although research is not conclusive, it seems to suggest that teachers should present clear positive instances initially, and gradually introdue those negative and positive instances which are most easily confused.

(3) Method of presenting exemplars. *Simultaneous or successive:*

Because of their relative demands on memory load, a simultaneous method of presenting instances of the concept is more effective than a successive presentation of instances. The simultaneous method also facilitates discrimination.

(4) Mode and sequence of rule presentation: *inductive vs. deductive strategies*--inductive strategies are clearly less efficient than deductive strategies, but may produce greater transfer effects.

(a) Research evidence regarding transfer effects is not conclusive.

(b) *Inductive*: (also called discovery method or egrule) Present learner with an appropriate series of exemplars and non-exemplars of a concept labeled as such and allow him to infer the nature of the concept by noticing invariant features or attributes.

(c) Deductive (also called ruly): Present concepts by verbal definition or by description of representative exemplars. Verbal specification of critical attributes enables the individual to short cut the process of hypothesis discovery and testing.

6. *Implications for Teachers*--Research reviewed in the preceding section suggests that teachers should:

a. Carefully analyze the nature of the concept learning task.

(1) Recognize that some tasks are more difficult than others.

(a) Relational and disjunctive concepts are more difficult than conjunctive concepts.

(b) With the exception of very young children, nonreversal shifts are more difficult than reversal shifts. When task demands a non-reversal shift, a teacher should provide instructions aimed at breaking the youngster's mediational set.

(2) Insure that youngsters have mastered requisite concepts.

(a) Recognize that some attributes are themselves difficult concepts.

(b) Phrase rules in a language which is appropriate for the student's age level.

(c) Difficulties in concept learning may often be traced to this source.

(3) Recognize that a youngster may not be able to verbalize the rule, even though he has acquired the concept.

(a) If a teacher expects child to recognize instances *and* verbally define the concept, then he must teach for both kinds of responses.

(b) Consider the demands of the defining task. Some concepts are difficult to define in words.

b. Formulate teaching strategies which (a) increase the distinctiveness of the concept's attributes, and (b) reduce memory load for the learner.

(1) In selecting exemplars and non-exemplars for use in instruction, a teacher should:

(a) Select exemplars with high dominant critical attributes.

(b) Provide concrete instances (pictures or actual objects)

        for younster's at, or below, the concrete operational stage of cognitive development.
        (c) Select instances which have few irrelevant attributes (e.g. don't show a picture of a cow in a cluttered barnyard as an illustration of the concept "cow.)
        (d) Present several illustrations simultaneously rather than one at a time.
        (e) Present clear positive instances initially, and gradually introduce those negative and positive instances which are most easily confused.
    (2) Provide immediate feedback whenever possible.
    (3) If concerned with efficiency, adopt the deductive sequence of rule presentation.
    (4) If concerned with transfer, and student interest, adopt the inductive sequence of rule presentation.
        (a) Should determine whether concept is critical enough to demand the increase in instructional time.
        (b) May improve efficiency by training students in the use of focusing strategies.

D. Problem Solving.

1. General Overview.

a. Basic Characteristics.

- (1) Is the most complex behavior that humans can acquire.
- (2) A problem situation exists when there is a goal to be attained, but the individual sees no well-defined, well-established means of attaining it; or when the goal is so vaguely defined or unclear to the person that he cannot determine the relevant means for attaining it.
    - (a) Problem situations vary from person to person. What one recognizes as a problem, another may not.
    - (b) A problem situation cannot exist for an individual unless there is a goal he wishes to attain. Goals may be indirect (e.g., a student being motivated to solve algebraic equations by his desire to maintain his class standing.)
    - (c) A problem cannot exist for an individual when he knows the means by which he can attain the goals.
- (3) From the learner's viewpoint, a problem may be presented to him for solution (receptive learning) or it may be discovered by him (problem sensitivity). Most educational experiences involve the presentation of problems.
- (4) Two points of view have been expressed regarding the means of solving problems--insight and trial and confirmation:
    - (a) Insight--The solution to a problem is arrived at suddenly after some initial effort.
    - (b) Trial and Confirmation--A problem gets solved through gradually eliminating errors and putting together correct responses.
    - (c) Certain problems lend themselves to solution with fewer trials than others (e.g. form four equilateral triangles from six matchsticks vs. decide the

appropriate apparel for the senior prom.)

(d) More trial and confirmation and less insight is typical when a given class of problems is first encountered. Insight is probably possible only after prior experience with the relevant class of problems.

b. Methods of analyzing problem-solving behavior.

(1) Logical analysis--Thinkers focus upon their own thought processes and try to relate what happened when they encountered a problem.

(a) Dewey's five steps (an illustration).
--Recognizing that a problem exists.
--Identifying the nature of the problem.
--Searching for possible solutions
--Analyzing the adequacy of the tentative solutions
--Testing the most promising of the tentative solutions.

(b) There are several other examples of this approach, but none vary dramatically from Dewey's description. (See Kausmeier and Goodwin, Learning and Human Abilities, 1961, p. 264.)

(c) Criticisms of this approach
--Problem solving does not seem to occur in such an ordered fashion.
--Testing of hypotheses is not an unfailing source of problem solution, i.e. insight does occur.
--Interpreter reviews his thought processes after solution when it is easy to generate a post hoc explanation.

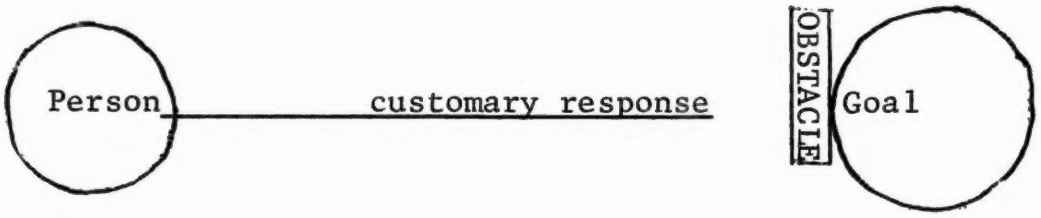
(2) Experimental Approach--Present subjects with problems and closely observe reactions, or have subjects say aloud exactly what they are thinking as they search for a solution.

(a) Illustration of experimental method:
Bloom and Broder presented series of problems to two groups of college students: (a) academically successful and (b) academically nonsuccessful. Urged subjects to "think aloud." Four major categories of behavior were evident in the contrast between the two groups:
--Comprehension of essence of problem: nonsuccessful students were less able to initiate attack on problem.
--Ideas that are inherent in the problem: nonsuccessful students less able to utilize their knowledge in solution.
--Style of problem solving behavior: nonsuccessful students appeared to have no method of attack; tended to impulsively guess the correct answer. Successful students had an orderly manner of attack; formed hypotheses and made assumptions where they lacked knowledge.
--Attitude toward problem solving behavior: nonsuccessful students lacked assurance in their own capacity to master the problem.

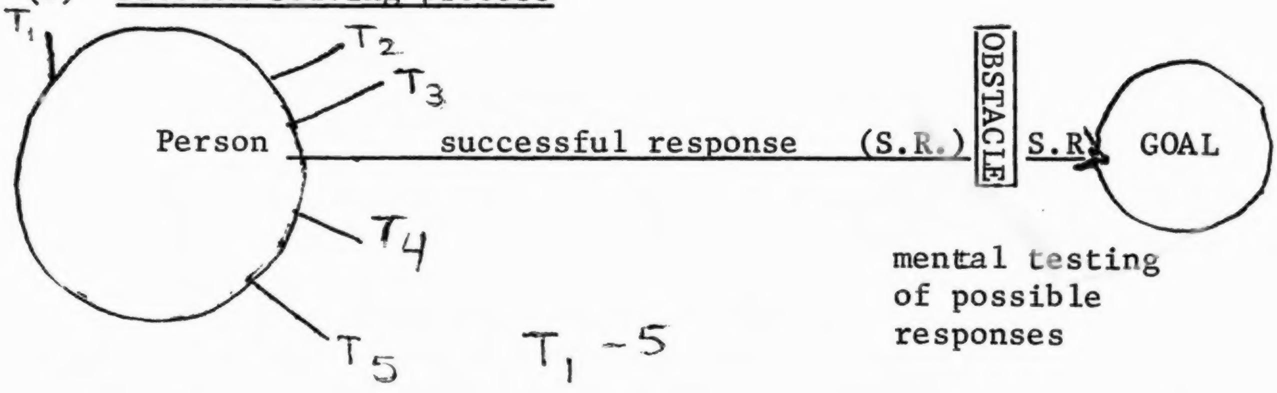
        (b) These studies do not appear to contradict Dewey's proposed sequence.

c. Models of problem solving behavior.

- (1) Behavioral View--Habit Family Hierarchies. (Maltzman)--Initially, the correct response is low in a single hierarchy or the correct habit family hierarchy is low in compound hierarchy. The strength of the correct response or hierarchy must increase for problem solution. The originally dominant but incorrect response will gradually be extinguished as a result of repeated failures to solve the problem. In the meantime, through the process of "mediated generalization", the strength of responses low in the hierarchy will increase in strength to the level necessary for problem solution.
- (2) Gagne's View--Problem solving is a process which "combines" two or more previously learned rules in a "higher-order rule."
    - (a) Example--To determine the centigrade temperature at which water boils, an individual combines rule (a) water boils at 212°F. with rule (b) F=9/5C +32.
    - (b) Rules--Are equivalent to principles, and involve an "if-then" relationship between two or more concepts.
- (3) Cognitive view (Travers)--Problem solving is a process by which man mentally manipulates his environment, mentally tests his tentative solutions, and finally determines his course of action.
    - (a) Problem-situation



    - (b) Problem-solving process



d. Problem-solving and Creativity.

(1) There are at least two directions of thinking which may underlie problem-solving: convergent and divergent. (Guilford).

(a) Convergent thinking (also known as logical thinking, critical thinking, and reasoning.) Thought which is directed toward acquiring a solution or closure to a problem for which there is a known or generally accepted answer.

(b) Divergent thinking (also known as creative thinking, imaginative thinking, and original thinking). Thought which is directed toward new (at least to the thinker) or not generally accepted solutions. Thus, a variety of responses is produced. The product is not completely determined by the given information. Divergent thinking is characterized by:

--Flexibility: Ability to shift from one category of response to another (e.g. list all the uses you can think of for a pencil.)

--Originality: Novelty of responses (e.g., short story is presented, and the student is told to list as many appropriate titles as he can.)

--Fluency: Quantity of output (e.g. write names of things that are white and edible.)

(2) Creativity may, therefore, be viewed as a subcategory of problem solving, i.e. problem solving which requires divergent thinking.

2. Variables which influence problem solving behavior.

a. Characteristics of the learner.

(1) Degree of mastery of requisite principles--As Gagne's model suggests, problem solving involves the discovery of a relationship among component principles. An individual who fails to master one or more of these principles will, therefore, fail to solve the problem. (e.g. The solution to Maier's pendulum problem requires knowledge and application of three principles: the pendulum principle; making long poles out of short poles by using the table clamp; and , wedging one pole in place on the ceiling using one or two other poles.)

(a) Students must know these principles and their requisite concepts.

(b) Students must be able to apply this knowledge in the problem situation.

(2) Intelligence.

(a) Research suggests that more children of high I.Q. than low I.Q. note and correct mistakes, verify solutions, and use a logical approach. More children of low than high I.Q. offer incorrect solutions, make random approaches to the problem and do not persist in attempts at solving problems. In short, high I.Q. students are more efficient problem solvers.

(b) These differences are similar to those between successful and nonsuccessful college students (See review of Bloom and Broder above).

(c) Research also suggests that there is only a moderate correlation between I.Q. And creativity.

(3) Previous success or failure in problem solving.
  (a) Students who withdraw from the problem-solving situation prior to achieving a solution set higher goals originally, use fewer alternative solutions in attempting to solve the problem, and perform less effectively after failure than do those who achieve solutions.
  (b) Individual reactions to failure in problem solving. may take any of the following non-adaptive forms.
    --Repitition of inappropriate responses: May not know what changes should be made due to inadequate information, or may be afraid to try a new method, i.e. feels secure because response was successful in the past.
    --Aggressive reactions: A hostile attack upon the problem situation or people in it. May be attempted because in the past such a response has removed obstacles to goals. (e.g., a child may have learned that when he becomes angry he gets his way.)
    --Dependency reactions--Is maladaptive when utilizes other persons not to aid, but to actually solve a problem. Disengages the learner from the problem and deprives him of the opportunity to learn. If individual is rewarded for having a problem solution, instead of for learning to solve problems, he may continue to avoid problem situations.
    --Goal substitution--is maladaptive if substitute goal is not capable of satisfying the needs or reducing the motivation that prompted the problem solver to seek the original goal (e.g. fantasy.)

(4) Set-Cognitive processes that predispose an individual to view and approach a problem situation in a given way.
  (a) Relevant categories.
    --Rigidity: Persons taught by a single method and having experienced success repeatedly in solving a series of related problems cling to the method even when repeated trials with it are found not to work in solving new problems of another class (e.g. Luchin's water jar problems.)
    --Functional fixedness: Familiarity with the objects of stimuli in a given problem situation predisposes him to see and respond to these objects in customary ways. (e.g. Maier's pendulum problem is extremely difficult for college students because it requires the learner to use familiar objects in unfamiliar ways. In Maier's string problem, learners select objects (electric switch or relay) which were not used in preceding problems to serve as weights for the pendulum.)
    --Learning sets: Improved ability to master certain kinds of learning problems as a result of previous experience with problems of the same sort. (e.g. Harlow's studies of discrimination learning of Rhesus monkies.

--Induced sets: Instructions are frequently used to establish a set. Instructions may serve at least four functions in problem solving: (1) to identify the terminal performance required (2) to identify parts of the problem situation. (3) to recall relevant abilities, and (4) to guide thinking. Research consistently demonstrates that when instructions are effective, the student receiving them behaves differently from the way he would without the instructions. Appropriate instructions, therefore, facilitate problem solving. Apparently, simplify the learning task by pointing up what should be attended to and what may be ignored.

(b) Flexibility and rigidity are not generalized personality traits. When individuals are presented varying types of problem-solving tasks, they are apt to be rigid on one type but quite flexible on another.

(5) "Student's awareness"--Students are often able to solve problems and to transfer this knowledge to new problems without being able to verbalize the relevant rules or principles.

b. Instructional variables.

(1) Groups vs. individuals--Although research comparisons between group and individual problem solving have yielded somewhat inconsistent results, they seem to suggest that groups can solve more efficiently than individuals. But this advantage does not hold when transfer problems are later posed to individuals from both experimental conditions. Here there are usually no differences favoring the individual problem solvers.

(a) A group will usually be superior to individuals only when there is someone in the group who is capable of solving the problem and of communicating this information to the rest of the group.

(b) Groups allow a division of labor, but the larger the group, the more complicated the process of generating adequate group communication.

(c) Because they allow the presentation of minority opinions, groups with appointed leaders are generally more effective than groups which elect their own leaders.

(d) Distributed leadership responsibilities among all members is more effective when the group has to assimilate and organize "outside" information: centralized direction is more effective when the actions of the individuals in the group is the major information to be processed.

(2) Degree of guidance.

(a) Classification scheme--Wittrock provides a useful scheme for classifying the amount of instructional guidance a teacher may provide in problem solving.

--Expository teaching: The teacher provides both the principle and the problem solution.
--Guided discovery: The teacher provides either the principle or the problem solution, but not both.
--Unguided discovery: Teacher gives neither the principle which applies, nor the problem solution.

(b) Although there is confusion in terminology and findings, research generally indicates that guided discovery is the most effective form of guidance: both in initial learning efficiency and the extent of transfer to new problems.

(c) Low ability students profit most from information about the method of solving the problem. More able students seem to profit equally from information about the method or information about the relevant rule. (principle)

3. Implications for teachers.
   a. Strategies based on variables shown to affect problem solving behavior.
      (1) A teacher should analyze the problems he presents to his students to determine the lower-order principles the students must know to solve the problem. He should then determine whether or not sutdents know them. Instruction in the component principle may be a necessary prerequisite to problem solving.
      (2) Teachers should also recognize that failure in problem solving may be due to the student's failure to apply principles, rather than his lack of knowledge of the principles.
      (3) Teachers must select problems which are appropriate for the intellectual abilities of his students. Low I.Q. students would probably profit from:
         (a) Increased instructional time spent in teaching methods for solving problems.
         (b) Direct guidance in the methods of solving problems.
      (4) Research suggests that teachers may help to alleviate the effects of failure in problem solving by:
         (a) Selecting problems which are with in the capacities of their students.
         (b) Providing preliminary instruction in the information and skills relevant to the problem.
         (c) Presenting problems graded according to difficulty-easy to difficult.
         (d) Providing reinforcement for correct responses and encouragement for any attempts at solution.
      (5) Teachers may help to overcome rigidity by:
         (a) Reinforcing (or at least allowing) student attempts to vary strategys in seeking problem solutions.
         (b) Arranging problems so that fresh attacks are required for each problem. This practice may also induce pupils to analyze problems carefully since they cannot rely upon direct correspondence with recent teaching.

(c) Providing training in the selection of alternative ways of seeking solutions to problems.

(6) Set induction is usually a necessary and desirable feature of instructional strategies.

(a) But instructions should not be too rigid or controlling since effective problem solving requires diversity and flexibility in responding--behavior which may be easily inhibited by instructions which discourage flexibility.

(b) Teachers should also utilize some check to determine whether or not students understand instructions. Problem solving inefficiency among academically unsuccessful students has been partially attributed to their failure to understand instructions.

(7) No one method of group organization is equally effective for all types of problems. Research seems to support the following generalizations:

(a) The group, like the individual, must be motivated to solve problems.

(b) The group must be composed of individuals who have sufficient information and knowledge to attack the problem, or who can acquire this information while working on the problem.

(c) There must be free and open communication between all members of the group.

(d) The pattern of leadership should maximize communication among members, and should supply a control function relevant to the group task.

(e) In general, the larger the group, the lower the probability of effective information gathering, processing, evaluating and hypothesis formulating, and testing. Also less chance that all group members will participate actively.

(8) Teacher's should utilize some form of guided discovery.

(a) Provide verbal direction of the students thinking, short of giving them the solution to the problem, or:

(b) Provide solutions without stating the relevant principles.

b. General Teaching strategies.

(1) "Simple to complex" (Gagne)

(a) Basic description--Gagne argues that there are eight levels of learning which may be hierarchiacally ordered as follows: signal learning stimulus-response learning, chaining, verbal association, multiple discrimination, concept learning, principle learning, and problem solving. Success at any level presupposes mastery of relevant information or skills at the lower levels. Thus, Gagné would argue that if you want to teach problem solving, you must somehow, insure that students have thoroughly mastered the requisite concepts and principles. Curriculums should also be organized in a "simple to complex" sequence of content. Should teach concepts, for example, prior to presenting principles.

(b) Illustrations--In teaching reading begin with the alphabet, then sound-symbol relationships, then words. In teaching foreign language start with vocabulary, then grammar, and build up to conversation; adoption of Skinner's tightly sequenced linear programs; and, general "task analysis" approach to instruction.

(c) Problem-solving--Gagne might argue that a teacher should adopt the following steps in instruction for problem solving: (taken from De Cecco, 1968)
--Describe for the students the terminal performance which constitutes the solution of the problem.
--Assess student behavior to determine if they have mastered the concepts and principles required in the solution of the problem.
--Invoke the recall of all relevant concepts and principles.
--Provide verbal direction short of giving them the solution to the problem.
--Verify the students' learning by requiring them to give a full demonstration of the problem solution. (Using other problems of the same class.) i.e. test for transfer.

(2) "Complex to simple"--also known as "learning by discovery". (Bruner)

(a) Basic Description-Bruner argues that "there is an appropriate version of any skill or knowledge that may be imparted at whatever age one wishes to begin teaching--however preparatory the version may be. The choice of the earlier version is based upon what it is one is hoping cumulate." Thus, it is the method one utilizes, rather than the entering behavior of the students, which serves as the crucial variable in problem solving success. Further, one should adopt a method which is as consistent as possible with the desired final outcome. In short, if you want students to solve problems, start with problems. Assume that relevant simpler levels will be mastered as one learns on the complex level.

(b) Illustrations--In teaching reading begin with the whole word (sight vocabulary); in teaching foreign languages use the audio-lingual approach (instructor Crowder's branched programs; Suchman's "inquiry training" in general science; and Bruner's method of teaching the geography of the North Central States.

(c) Problem-solving--Bruner might argue that a teacher should adopt the following steps in instruction for problem solving:
--Describe for the students the terminal performance which constitutes the solution of the problem.
--Present a problem which has (a) its own built in direction in the sense that it has a clear terminus, and (b) also has the idea of alternatives built in; different ways of achieving the terminus.
--Provide direction for only those children who apparently need it; let others alone to discover their solutions.
--Review and evaluate suggested solutions or alternatives.
--Verify the students learning by tests for transfer to new situations.

(d) Critique of discovery learnings: Bruner claims four advantages for discovery learning: (1) student acquires information in such a way that it is readily available in problem solving, (2) increases intrinsic motivation. (3) teaches students the technique of discovery; (4) results in better retention since student has organized his own information. These arguements are generally speculative, rather than research based.
--Disadvantages of discovery learning include: (1) time consuming, (2) may be appropriate only for those students who are bright, highly motivated, and able to delay gratification, (3) inconsistent with research suggesting that guided discovery is most effective.

(3) Mixed model--Start out at complex level, but introject drills of various sorts aimed at improved comprehension of relevant lower levels. Programmed instruction might be a convenient source of drill.

E. Transfer and Retention.

1. General Overview of Transfer.
   a. Description--Transfer of learning is said to occur when experence, or performance on one task influences performance on some other task.
   b. Categories of transfer:
      (1) Transfer may have three different effects:
         (a) Positive transfer--Performance on one task aids or facilitates performance on a second task.
         (b) Negative transfer--Performance on one task prohibits or disrupts performance on a second task.
         (c) Zero transfer--Performance on one task has no effect upon performance on a second task.
      (2) Transfer may also occur in two different directions:
         (a) Proaction: Experience or performance on one task, influences performance on some subsequent task.

Experimental Group Learn Task 1	Learn Task 2	Test Task 2
Control Group Rest (neutral activity)	Learn Task 2	Test Task 2

(b) Retroaction: Experience or performance on one task influences performance on some previously learned task.

Experimental Group Learns Task 1	Learns Task 2	Test Task 1
Control Group Learns Task 1	Rest (neutral activity)	Test Task 1

c. Theories of Transfer.

(1) Formal Discipline: This view contended that the "mind" was composed of several faculties such as reasoning, memory judgment, and attention. These faculties could be strengthed through vigorous exercise in much the same way as muscles are strengthened. The core of any good curriculum was, therefore difficult subjects like Latin and mathematics since such subjects were believed to "discipline" the "mind." This view was prominent from at least 300 B.C. to the turn of the 20th century when it was subjected to an experimental assault. Jame's classic experiment, for example, demonstrated that memorizing one poem had little or no effect upon ability to memorize a second poem.

(2) Identical Element (Thorndike): Contended that training in one kind of activity would transfer to another as long as certain features such as aims, methods, and approaches were identical in the two tasks. More specifically, transfer will occur from an activity involving S-R bonds XYZ, to another activity, if the activity also involves bonds XYZ. Thus, the theory of identical elements viewed transfer as quite specific in scope. This theory was, therefore, translated into curriculum as a move toward particularization: since very little transfer is apt to occur, each objective must be attained by unique and explicit instruction. (e.g. cannot assume that ability to multiply 8 x 7 will transfer to 7 x 8.)

(3) Transfer by generalization (Judd): Judd argued that the important condition for transfer was the student's ability to abstract the general rules or principles which are inherent in any learning task. If successful, he can then apply these generalizations to another situation which possesses various degrees of similarity to the original learning experience. Thus, in order to teach for transfer, emphasis should be placed on getting the student to think about those features of the learning task that might be generalized to new situations.

(4) Contemporary approach: Is more fruitful to examine variables known to influence transfer than to adhere to a single point of view. Such an approach seems to incorporate features of all three of the above views.

2. Variables which influence transfer of training conditions are
    a. Over-all task similarity--Transfer of training conditions are highly similar to those of the ultimate testing conditions.
    b. Stimulus similarity--When a task requires the learner to make the same response to new but similar stimuli, positive transfer increases with increasing stimulus similarity. (a) Is equivalent to stimulus generalization, (b) can be either "primary or mediated."
    c. Response Similarity--When a task requires the learner to make a new or different response to the same stimuli, transfer tends to be negative and increases as the responses become less similar.
        (1) The condition for maximum negative transfer is having to make antagonistic responses to identical stimuli.
        (2) If highly similar responses are made to the same stimuli, positive transfer may occur.
        (3) It is usually more difficult to obtain negative transfer under these conditions in verbal learning than it is in motor skills learning.
    d. Joint stimulus-reponse variation--If the responses in the transfer task are different from those in the original task, then the greater the similarity of stimuli, the less the positive transfer.
    e Learning to learn (Learning Sets)--Cumulative practice in learning a series of related tasks or problems leads to increased facility in learning subsequent tasks or problems of the same general nature.
        (1) The facilitating effects are apparently due to: Learning general approaches or modes of attack; becoming familiar with the situation; and learning related classes of materials.
        (2) Early trails are extremely significant in establishing a reliable learning set. Therefore, considerable time and effort should be spent on the early problems before moving on to more complex problems.
        (3) Insight appears to develop as a result of extensive practice in solving similar or related classes of problems.
        (4) Learning sets are forms of nonspecific transfer since they are not dependest upon any specific features of the task, but are dependent upon more general characteristics such as modes of attack and general principles.
        (5) Learning sets should be distinguished from "warm-up" which is the pronounced, but temporary, faciliatating effect resulting from practice in some activity prior to learning the transfer task, and is another form of nonspecific transfer.
    f. Time interval between tasks.
        (1) When performance on the transfer task does not depend on memory for specific items in the original task, the extent of transfer of training is approximately constant across varying time intervals between tasks.

(2) Where transfer does depend upon memory for specific items, transfer will vary inversely with the amount of elapsed time between tasks.

g. Degree of original learning--The greater the amount of practice on the original task, the greater the likelihood of positive transfer.

(1) Negative transfer frequently occurs following only limited practice on the original task.

(2) Therefore, overlearning facilitates transfer, retention, and the establishment of learning sets.

h. Task or stimulus variety-In general, variety of tasks,or of their stimulus components, during original learning increases the amount of positive transfer obtained.

i. Task characteristics-No clear-cut generalizations about the role of task characteristics such as difficulty or complexity appear evident.

j. Understanding-Transfer is greater if the learner understands the general rules or principles which are appropriate in solving new problems. As indicated earlier, "guided discovery" strategies are most apt to yield this understanding and subsequent transfer.

k. Group learning-There is no evidence for the automatic transfer of problem solving skills from a group to an individual situation.

3. Theories of Retention

a. Interference theory (Behaviorists).

(1) Basic Description-Retention is nothing more than a response produced by a stimulus. Forgetting, therefore, results when stimuli lose their capacity to evoke previously associated responses. This loss results from the fact that one learns similar associations both prior to the task on which retention is determined, (proactive interference), and subsequent to this task, (retroactive interference). This additional learning introduces competing responses to the critical stimuli. Because of stimulus generalization, the greater the similarity between the two sets of stimuli, the greater the interference.

(2) Supporting evidence-Has been obtained from direct tests of the proactive and retroactive paradigms as well as from comparisons of retention during waking hours and after sleep.

b. Gestalt Theory.

(1) Basic Description-Learning results in the establishment of memory traces which are isomorphically equivalent to the incoming information. Forgetting results from changes which occur in these traces over time. These changes, in turn, result from two primary mechanisms--assimilation and autonomous disintegration. Assimilation refers to complex interactions between established traces and incoming traces, while autonomous disintegration refers to a type of spontaneous decay or disintegration.

(2) Supporting evidence--Has been derived primarily from studies of the retention of figures.

c. Ausubel's Theory of Obliterative Subsumption (Cognitive Theory)

(1) Basic Desription-Although there are several cognitive models (e.g., Goss's "conceptual schemes" and Bartlett's "schemata"), Ausubel's Theory is perhaps the most explicit. Ausubel argues that as new information enters the cognitive field of the learner, it interacts with, and is appropriately subsumed by a relevant and more inclusive conceptual cluster which he terms a "subsumer." As a result, both the new information and the subsumer are somewhat modified. However an established subsumer ordinarily undergoes considerably less modification than the subsumed element. Forgetting occurs gradually, but results from the learner's ultimate inability to dissociate the incoming information from its relevant subsumer. Thus, the learner ultimately retains the product of the interaction between the incoming information and its subsumer.

(2) Supporting evidence--Studies of the impact of "advance organizers" on the retention of "meaningful" materials.

d. Two-Stage Memory Storage Process Theory.(Krech)

(1) Basic Description-After every learning trial, a short-lived electrochemical process is established in the brain. This process is the physiological mechanism which underlies short-term memory. Within a few seconds or minutes, however, this process decays and disappears. But before decay sets in, the short-term process triggers a second series of events in the brain. This series is chemical in nature and involves the production of new proteins and higher enzymatic activity levels in the brain cells. These changes are more permanent and serve as the physiological basis for long-term retention.

(2) Supporting evidence-Studies of the impact of interference on the short-term process; impact of drugs on learning; and analysis of brain tissue following experience in enriched and impoverished environments.

4. Variables which affect retention.

a. Variables which affect the extent of interference.

(1) Stimulus similarity-The greater the extent of similarity between the stimuli in the critical and interpolated learning tasks, the greater the extent of interference and subsequent forgetting.

(2) Degree of original learning-The greater the extent of learning in the original and/or interpolated learning tasks, the lower the extent of interference.

(3) Amount of previously mastered material--The greater the amount of related material that has been previously mastered, the greater the extent of proactive interference.

(4) Meaningfulness--Although research evidence is contradictory, it seems to suggest that less interference occurs for "meaningful" materials than for "rote" materials.

b. Overlearning--Practice beyond the point of "bare mastery" facilitates retention. Overlearning may be especially critical in the retention of motor skills and tasks which require the learner to memorize something.

c. Recoding--Active attempts on the part of the learner to subjectively organize incoming information facilitates both acquisition and retention. (e.g. transforming the number series 2,5, 8, 11, 14 17, and 20 which represents seven units of information into a single sentence which describes the underlying relationship among the numbers.)

d. Review-Periodic reviews facilitate retention. Experimental evidence suggests that more frequent reviews immediately after the initial learning, followed by relatively widely spaced reviews over a period of time, is most effective in reducing forgetting.

e. Active recitation-Recitation requires greater involvement of the learner than passive rereading and, therefore, facilitates retention.

f. Generalizations vs. specific facts--Generalizations or principles are retained longer than specific or isolated facts.

g. Pre-existing attitudes--Material which is consistent with the learner's attitudes or values is retained better than material which is inconsistent with the learner's attitudes or values. This phenomenon is called "selective retention" or differential forgetting."

h. Chemical or drug injections-Injections of chemicals which affect the central nervous system have been shown to either facilitate or interfere with the long-term retention of various animals. These may eventually be extended to humans.

V. MEASUREMENT AND EVALUATION.

A. Purposes of Evaluation and Measurement.

1. The distinction between measurement and evaluation.
   a. Evaluation-requires making judgements about the relative desirability of some behavior in terms of a standard or criterion.
   b. Measurement-is more restricted, and is concerned with the administration and scoring of tests of all types.
   c. Measurements are useful in subsequent evaluations.
2. The interrelationship among the three components of instruction: statement of objectives; instructional strategies or methodology; and evaluation.
   a. Objectives determine the goals of instruction; methodology suggests the strategy for accomplishing these goals, and evaluation indicates the extent to which these goals have been satisfied.
   b. Cannot meaningfully evaluate without a clear specification of the goals the students were expected to reach, i.e., without a clear statement of objectives.
   c. A weakness in any of the above components will have a serious impact on the overall effectiveness of instruction.
3. General purposes of evaluation and measurement.
   a. Facilitates student learning through feedback and review.
   b. Aids in the assessment of student progress which may be utilized in grading and in evaluating the extent of progress toward stated goals.

c. Aids teacher's understanding of the individual student through identification of general areas of strength and weakness, general interests, general academic potential, and potential sources of learning difficulty.

d. Facilitates self-understanding through identification of general strengths and weaknesses, which, in turn, should help a student set realistic goals and aspirations.

e. Serves as a useful basis for evaluating instructional programs by providing evidence regarding the effectiveness of certain methods or the appropriateness of certain objectives.

f. Provides a valuable source of evidence in administrative decisions such as ability grouping, special education, promotion, the selection of instructional materials, the selection of general instructional strategies, etc.

g. Aids in the diagnosis of specific learning difficulties.

h. Serves an essential function in education research.

B. Test Characteristics.

1. Validity-The extent to which the test measures that which it purports to measure.
   - a. Content validity-The extent to which the test sample is representative of the universe of criterion behavior.
     - (1) Is achieved through random sampling or by a table of specifications.
     - (2) May not be assessed through statistical procedures.
     - (3) Is most crucial in achievement testing.
   - b. Predictive validity-The extent to which test scores predict future behavior.
     - (1) May be assessed by correlating test scores and some subsequent measure of the criterion behavior.
     - (2) Schools should establish local expectancy tables for use in counseling individual students.
     - (3) Predictive validity is most crucial in aptitude testing.
   - c. Concurrent Validity-The extent to which test scores correlate with other existing measures of the criterion behavior.
     - (1) Correlations are usually computed between test scores and scores on well-validated tests of the same nature.
     - (2) Is important for newly devised tests which enjoy some practical advantage over existing tests in the area. (e.g., takes less time to administer.)
   - d. Concurrent Validity-An analysis of the meaning of test scores in terms of psychological concepts.
     - (1) Is shown by the effectiveness of the test in differentiating among groups that are presumed to differ with respect to the relevant trait, or by the relationship of test scores to predicted behavior in natural or specially designed situations.
     - (2) Factor analysis may also be used to study the extent to which tests measure unitary independent dimensions, and to help in interpreting the major sources of variation in test scores.

2. Reliability-The extent to which a test consistently measures some trait or characteristic.
    a. Methods of estimating the reliability of tests scores.
        (1) Test-retest method (coefficient of stability)-Correlation between scores on the same test administered at two different times.
            (a) Measures error variance due to temporal variations in the characteristics of the examinee (e.g., health or emotional tension) as well as variation in the conditions of test adminstration.
            (b) Is rarely computed due to inconvenience and the problem of practice effects.
        (2) Equivalent-forms method (coefficient of equivalence)--Correlations between two or more equivalent forms of the same exam.
            (a) Measures error variance due to content sampling.
            (b) Equivalent forms administered at two different times yields a coefficient of equivalence and stability.
            (c) Generally yields lowest estimates of reliability.
        (3) Split-half method (coefficient of internal consistency) Correlation between scores on two halves of the same exam (e.g. between scores on odd and even items.)
            (a) If the Kuder-Richardson Formula 20 is used, a reliability coefficient is obtained that approximates the average of all split-half coefficients which would be obtained on all possible divisions of the test into equivalent halves.
            (b) The greater the homogeneity of items, the higher the internal consistency.
            (c) Yields a spuriously high estimate of reliability if the test is highly speeded.
            (d) Is used more often than any other method because it requires only one group of pupils, one test form, and one test administration.
    b. Factors affecting the size of reliability coefficients-In general, the reliability coefficient may be increased by:
        (1) Using the split-half method rather than the equivalent forms method.
        (2) Decreasing the time interval in the test-retest method.
        (3) Using a heterogeneous sample of students rather than a homogeneous sample.
        (4) Increasing the length of the test.
        (5) Increasing the size of the sample.
        (6) Increasing objectivity in scoring.
        (7) Maximizing consistency in test administration.
        (8) Selecting tests of an appropriate level of difficulty for students.
3. Practical considerations--Usability.
The following factors should also be considered in the selection of standardized tests.
    a. Ease of Administration.
        (1) Are directions clear and explicit?
        (2) Does the test require any special training on the part of the administrator?

- (3) Are the time limits reasonable and compatible with school scheduling?
- b. Special characteristics of the exam.
  - (1) Are equivalent forms of the exam available?
  - (2) Does the test yield single scores or a battery of scores?
  - (3) Is the cost reasonable in view of its potential uses?
  - (4) Is the test easily scored?
- c. Norms.
  - (1) Are the national norms based on a large, representative sample?
  - (2) How recently were the norms established?
  - (3) Could local norms be readily established?
  - (4) Are test results reported in a form which teachers can understand and apply appropriately?

C. Standardized Tests.

1. General Overview of available tests.
   - a. Aptitude Tests-Provide a general indication of an individual's ability to learn in some area.
     - (1) Subcategories include:
       - (a) Individual intelligence tests-Tests of general scholastic aptitude (abilities needed for success in school) administered to only one person at a time (e.g. Wechsler and Stanford-Binet.)
         --Have high reliability and validity.
         --Measure recall rather than recognition.
         --Scores are not affected by an individuals's reading abilities.
         --Require special training on part of administrator.
       - (b) Group intelligence tests-Tests of general scholastic aptitude administered on a group basis (e.g., California Test of Mental Maturity.)
         --Measure recognition rather than recall.
         --Scores are affected by an individual's reading ability.
       - (c) Special aptitude tests-Tests of an individual's ability to learn in some particular area. (e.g., Meier's Art Judgement Test).
       - (d) Multiple-Aptitude batteries-Tests of an individual's ability to learn in several different areas (e.g., Differential Aptitude Tests and General Aptitude Test Battery.)
       - (e) Experimental tests of creativity-Tests of divergent thinking (e.g. unusal uses, Remote Association Test).
     - (2) Limitations of Aptitude Tests.
       - (a) Reflect acquired as well as innate abilities.
       - (b) Profile scores on aptitude batteries are less reliable than overall scores, thereby making it difficult to interpret differences in subtest scores for a given individual.

        - (c) Predictions based on these test are occasionally less accurate than predictions based on corresponding achievement tests.
- b. Achievement Tests-Provides a general indication of an individual's mastery of some area.
    - (1) Specific achievement tests-Measure achievement in some particular area. (e.g., Gates-MacGinitie Reading Tests)
    - (2) Survey batteries-Measure achievement in several general curricular areas such as science and social studies (e.g., California Achievement Tests and Iowa Tests of Educational Development.)
    - (3) Diagnostic Achievement Tests-Designed to locate specific areas of weakness or strength, and to determine the nature of weaknesses or deficiencies (e.g. Gates-McKillop Reading Diagnostic Test).
- c. Differences between aptitude and achievement tests.
    - (1) Aptitude tests tend to be limited to tasks that are (a) equally unfamiliar to all examinees or (b) equally familiar in the sense that all students have had an opportunity to learn.
    - (2) Aptitude tests are designed to predict future performance in some activity, while achievement tests are concerned with the examinee's present level of performance as a basis for judging his success in past learning activities.
- d. Interest Inventories-Designed to measure general interests, usually as they relate to occupational choice (e.g., Strong Vocationl Interest Blank and Kuder Preference Record.)
    - (1) Have questionable validity-easy to fake.
    - (2) Interest in an area does not assure success in that area--is no guarantee that he possesses the required abilities.
- e. Personality measurement.
    - (1) Personality inventories-Attempt to measure various personality traits or characteristics such as masculinity, feminity, introversion, extroversion, etc. Through rating or forced-choice items.
        - (a) Is a general lack of consensus of what these concepts mean.
        - (b) Have little or no evidence regarding the stability of these traits.
        - (c) Despite built-in checks, it is easy to fake responses. Tests therefore, have questionable validity.
    - (2) Projective tests-Tests in which the examinee freely responds to a series of stimuli such as ink-blots, pictures, unfinished sentences, etc. Assume that an individual "projects" manifestations of personality characteristics into his responses, which, in turn, can be scored and interpreted to yield a description of his basic personality structure (e.g., Rorschach Ink-Blot Test and Thematic Apperception Test.)
        - (a) Avoids the problem of faked responses.
        - (b) Administration requires extensive training on the part of the examiner.
        - (c) Subject to the same criticisms regarding the nature of personality traits as the general inventories.

2. Interpretation of standardized test scores.
    a. Statistical concepts essential to test interpretation.
        (1) Frequency distribution-A tabulation of scores from high to low or low to high, which depicts the number of individuals that obtain each score.
            (a) Skewed distribution-Distributions in which there is a marked departure from symmetry or balance around the mean.
            (b) Normal distribution-A frequency distribution that in graphic form has a distinctive bell-shped appearence. Scores are symmetrically distributed about the mean. Available tables indicate the proportion of scores falling within a given distance from the mean (e.g., approximately 68% of the scores fall within a distance of one standard deviation from the mean.)
        (2) Measures of central tendency.
            (a) Mean--the sum of a set of scores divided by the number of scores.
            (b) Median--the middle score in a distribution; the 51th percentile.
            (c) Mode--the score or value that occurs most frequently in a given distribution.
        (3) Measures of dispersion.
            (a) Range--the difference between th lowest and highest scores obtained on a test by some group.
            (b) Standard deviation--a measure of the extent to which scores cluster about the mean.

$$S.D. = \sqrt{E \ \frac{(X-M)^2}{N}}$$

            (c) Standard error of measurement--a measure of the extent to which scores cluster about a hypothetical "true score."
            --True score-the average score of an infinite series of measurements with the same or exactly equivalent test, assuming no practice effect or change in the examinee during the testing.
            --S. E. meas. = S.D. test 1-r
            (d) Standard error of a difference-a measure used to determine the statistical significance of a difference between two scores on two means.

$$S.E.\ diff. = \sqrt{S.E.^2\ meas. + S.E.^2\ meas.\ 2}$$

        (4) Derived scores.
            (a) Grade-equivalents-The grade level for which a given score is the real or estimated average.
            (b) Percentile rank-The percent of scores in a distribution equal to or lower than the score corresponding to the given rank.

(c) Stanine-one of the steps in a nine-point scale of normalized standard scores. The stanine scale has values from 1 to 9, with a mean of 5, and a standard deviation of 2.

(d) Standard scores.

--Z scores-The distance of a given raw score from the mean, where distance is expressed in standard deviation units.

$$Z = \frac{\text{raw score (X) - mean (M)}}{\text{Standard deviation (S.D.)}}$$

--Deviation I.Q.'s

Stanford-Binet = 100 +16 Z

Wechsler= 100 + 15Z

(5) Correlation-Degree of relationship between two scores or measures; tendency of one score to vary concomitantly with the other.

(a) Pearson-Prodict-Moment

Spearman Rank Order

b. General Guidelines to Test interpretation.

(1) Grade equivalents are subject to more misinterpretations than any other derived score (e.g. many teachers are disappointed if a student does not perform at his "grade level"; yet, by definition, 50% will fail to reach this level of performance.

(2) Standard scores are the only derived scores which permit comparisons of an individuals level of performance on two different exams. The standard error of difference should be used to determine the statistical significance of obtained differences.

(3) By assuming that scores are normally distributed, it is possible to estimate percentile ranks from standard scores.

(4) Due to the lack of perfect reliability, and/or validity, test scores should always be treated as ranges rather than as absolutes. When ranges are based on the standard error of measurement, it is possible to make probability statements regarding the likelihood that a given range includes an individual's "true score."

(5) Educational decisions should be based on all relevant sources of evidence-rarely, if ever, on the results of a single standardized test. Such decisions should always be subject to periodic review.

(6) Teachers should not let the results of standardized tests unduely bias their observations of subsequent student behavior. (e.g. Research suggests that I.Q. scores may promote "self-fulfilling prophecies"-Rosenthal)

3. Constructing Test Items.

a. Advantage and limitations of essay and objective tests.

        (a) More reliable.
        (b) Permits more extensive sampling of course content.
        (c) Easily and objectively scored.
    (2) Advantages of essay exams.
        (a) Experimental studies indicate that students are more likely to focus attention on the important concepts of a course, to organize the materials of course into some meaningful outline, and to search for applications and illustrative materials in preparing for an essay test.
        (b) It is easier to construct essay items which measure higher levels of understanding, than objective items of the same nature.

b. Improving objective items.
    (1) Through careful editing:
        (a) General criteria which a teacher should apply in editing objective items include:
            --insure that items focus on important aspects of the subject matter.
            --insure that items are clearly stated, i .e. are not subject to ambiguous interpretaions.
            --insure that irrelevant clues do not lead the examinee to the right answer to the question.
        (b) Specific criteria for each type of objective item are listed in a number of general educational psychology texts (e.g. in writing true-false items avoid statements that are partly true and partly false.)
    (2) Through item analyses-By dividing students into two groups (top 27% and lowest 27%) on the basis of total test scores, and determining the per cent of students in each group who selected a particular alternative, it is possible to:
        (a) Identify ambiguous items-If students in the top group select two alternatives in near equal proportions, the item is probably amiguous. The popular distractor should be rewritten.
        (b) Identify weak alternatives-If few people select a given alternative, or if more of the top students than low students select a given distractor, that alternative should be rewritten.
        (c) Determine the discrimination power of an item- The percent of students in the top group who select the correct alternative minus the percent of students in the low group answering correctly represents an index of discrimination. This statistic reflects the extent to which a given item contributes to the total score. The larger the discrimination, the better the item (is ultimately reflected in the test's reliability.)
        (d) Determine the difficulty of the item-The percent of students who answer the item correctly represents an index of difficulty. Since neither extremely easy items, nor extremely difficult items contribute to differences

in total test scores, a teacher should generally select items with a difficulty index of 40-70%. (Will be ultimately reflected in the test's reliability.)

- c. Improving essay items.
  - (1) Through careful writing.
    - (a) Essay tests should be phrased in such a way that the student has a clear understanding of the nature and scope of the desired answer. This will usually involve some delimitations of a broad topic.
    - (b) More adequate sampling of course materials is possible through including a large number of questions with brief answers than from a small number of questions requiring extended answers.
  - (2) Through careful scoring.
    - (a) Allowing a student to select essay questions he wishes to answer introduces serious problems in scoring. No two questions are of comparable difficulty.
    - (b) Reliability may be improved by:
      --developing a scoring key from the teacher's own answer to the question which includes the number of points to be assigned for each idea or scoring category.
      --grading the same question on all papers: (a) reduces the number of points the grader must hold in mind, (b) reduces the "halo" effect.
      --sorting papers into four or five general levels of performance (excellent to inferior) on the basis of a rapid, preliminary reading; followed by careful reading of the papers in each group.
      --periodically rechecking papers that were graded earlier to insure that standards have not shifted

4. Test assembly-The following general principles should be applied in test assembly:
   - a. The test should be long enough to be valid and reliable but short enough to be usable.
     - (1) Increasing the length of a test increases its reliability.
     - (2) Estimates of time needed for essay exams should be based on teacher's written responses to the items. Estimates for objective exams may be based on fact that an average high-school student can answer two true-false items per minute and one multiple-choice item in slightly less than one minute.
   - b. The easiest items on the exam should be presented first, in order to reduce test anxiety and negative test-taking sets.
   - c. The test should be designed in such a way that reading rate and comprehension do not unduly influence the test scores.
   - d. A test should generally consist of no more than two or three types of items, and all items of one type should be included in one section.
   - e. The test directions should be clear and explicit.
   - f. The test should be appropriate to the ability and age level of the pupils.
5. Grading. (Evaluation)
   - a. Functions of grading.
     - (1) Administrative-Provides data for use in promotion, transfer, and graduation.

(2) Guidance-Identifies areas of special strength and weakness as a basis for realistic self-appraisal and future educational and vocational planning.
(3) Motivation-Functions as an incentive for academic performance.
(4) Informational-Inform the student and his parents of his progress toward educational goals. May function as a basis for cooperative planning among students, parent, and teacher.

b. Limitations of grading.
(1) Often have questionable validity.
(a) Girls receive higher grades than boys, despite comparable levels of achievement.
(b) There is a higher correlation between grades and achievement among men teachers than among women teachers.
(c) The "halo effect" frequently influences teachers to grade those whom they like higher than their achievement warrants.
(2) Parents often consider marks as evaluations of the worth of the child and of their success or failure as parents.
(3) Grades have a definite impact on a youngster's self-concept.
(4) Teacher's undergo "mental strain" at each grading period because of uncertainties or lack of confidence in their rationale for grading.
(5) Grades from any two teachers are rarely based on the same rationale and, therefore, lack comparability.

c. Methods of grading
(1) Traditional methods.
(a) Percents-The most frequently used method of assigning grades is to convert raw scores into percent scores and to assign letter grade equivalents. (e.g., 90-100%=A.) Occasionally final grades are reported as percents, rather than letter grades.
--Less "mental strain" on teachers since they are not required to make subjective decisions.
--Grade is as much a function of test difficulty as of achievement. This problem can be averted by repeating major portions of the exam from term to term and basing percent grade equivalents on past frequency distribution.
--Clearly ignores differences in needs, abilites, etc. among students.
--Would be most effective if teacher had clearly stated behavioral objectives with some indication of expected level of competence.
(b) Group comparisons- curves -With this method, frequency distributions are used as a basis for grades. Teachers may either make subjective judgments of where to separate "A's," "B's", "C's," etc. or they may rely on the properties of the normal curve (e.g. 1.5 standard deviations above the mean=A")
--Using fixed standards circumvents the need for subjective judgments by teachers, but is less flexible.

--Ignores differences in needs, abilities, etc. among students and, therefore, may have damaging effects on the self-concepts of less capable students.

VI. COMMUNICATION PROCESSES.

A. Theories of Communication center about three principle traditions--mathematical, social psychological, and linguistic.

1. Mathematical theory stems from the work of the mathematicians and engineers who worked in radio, telephone, and television.
   a. Technical problems center about the accuracy of transference of information from the sender to the receiver.
   b. Semantic problems are concerned with the receiver's interpretation of meaning, as compared with the meaning which the sender intended.
   c. Problems of influence or effectiveness consider the success with which the meaning conveyed to the receiver leads to the desired conduct.
   d. Meaning and effectiveness are seen to be restricted by the theoretical limits of the transmission of symbols.
      (1) In signal transmission, certain things not intended by the source of information (e.g., static, distorted shape, etc.) are added to the signal.
      (2) The communication channel is limited in the amount of information it can transmit.
   e. Particularly pertinent to this theory is the body of proability functions which deal with the Markoff process-past events are seen here to influence present probabilities.
2. The key orientation of social psychological theories of communication is the analysis of human codes and networks.
   a. Newcomb's theory of coorientation conceptualizes this process as the basis of human communication.
      (1) Individual's orient themselves toward objects in the environment, and also toward other persons oriented toward those objects.
      (2) An individual's orientation toward the object, another individual, or that individual's orientation toward the object, will influence him in his communications to the other individual.
      (3) Research indicates that instigation toward, perception of, and achievement of symmetry vary with the intensity of the individual's attitude toward the other individual.
   b. Several variables seem to relate to communicative behavior within the group.
      (1) The degree of homogeneity of orientation of a group toward certain objects are related to communication variables with respect to those objects.
      (2) Most group communication presupposes a great degree of perceived as well as objective homogeneity of orientation.

(3) Interpersonal attraction in the group varies with the degree to which the demands of co-orientation are met by communicative acts.

c. Messages are purposive or non-purposive depending on the intention of the sender to influence the perception of the receiver.

d. Feedback determines the degree to which a communication is influencing the intended receiver.

3. Linguistic theory is mainly concerned with the analysis of speech.

a. The units of linguistic analysis have been isolated by analytic methods.

(1) The phoneme is the unit of description of the sound system (the phonology) of a language.

(2) The morpheme represents a basic unit for grammatical description--it is the minimum sequence of phonemes which have a meaning.

b. The morphology and syntax of language describes the rules according to which units are synthesized into words, phrases and sentences.

(1) Language has a small,possible kernel of basic sentences.

(2) Sets of transformations can be applied to kernel sentences to produce new and more complex sentences from elementary components.

B. The Purpose and Fidelity of Communication Centers about basic processes of human interaction.

1. The scope of communication is vast, since research indicates that the average American spends 70 percent of his active hours in verbal communication--listening, speaking, reading, and writing in that order.

2. The purpose of communication may be regarded in terms of the goal of a sender or receiver of a message, rather than in terms of the property of the message itself.

a. We communicate to influence--to affect with intent; to elicit a specific response.

b. Distinctions must be made between intended and unintended receivers of communication.

c. Consumatory purpose refers to the accomplishment of the purpose of the message at the time of its consumption--i.e., immediate reward.

d. Instrumental purposes refer to the extent to which the consumption of the message is instrumental in producing further behavior--i.e., delayed reward.

3. Noise and fidelity in the communication process relates to the isolation of factors within each of the elements of communication and determine the effectiveness of communication.

a. Fidelity describes the extent to which the communication is effective in producing the desired result.

b. Noise relates to the distortion in the quality of the communication which reduces its effectiveness.

4. There are factors in each of the basic elements of communication which determine the fidelity of the communication process.

- a. The source of the communication, encodes a message intended to produce the desired effect.
    - (1) Communication skills centering around writing, speaking, and thinking or reasoning influence the fidelity of the encoded message.
    - (2) The attitudes of a communication source affect the ways in which he communicates.
    - (3) The amount of knowledge the source has about his subject matter will affect his message.
    - (4) The source is influenced by his particular position in social-cultural system.
- b. The decoder-receiver of the communication represents another important ingredient in message fidelity.
    - (1) Communication skills here center about the ability to listen, to read, and to think.
    - (2) The decoder's attitudes, knowledge-level, and position in the social system similarly operate in the effectiveness of the communication.
- c. The message is the actual physical product of the source-encoder and also affects fidelity.
    - (1) The message code is defined as any group of symbols which can be structured in a way that is meaningful to some person--languages are codes; the decisions as to which code to use, what elements of the code to include and how to structure the elements of the code we select affects fidelity.
    - (2) The content of the message is another important ingredient in effective communication.
    - (3) The treatment of a message (i.e, the decisions which the source-encoder makes in selecting and arranging codes and content,) similarly influences fidelity.
- d. The choice of the channel of communication by the source helps determine effectiveness.
    - (1) Little research evidence exists to help determine which particular channel to employ.
    - (2) Educators typically fail to analyze teaching from a channel point of view--which messages should be transmitted orally, which through books, which through nonverbal methods, and which physically.

C. Communication and Learning both need to be understood in terms of the variables which underly behavior and behavior change.

1. Learning is related to communication in that the communication objective of the source is often an alteration in the receiver's behavior.
2. Learning occurs if a stimulus is presented, perceived, interpreted, and responded to.
3. Several factors determine the development and strengthening of habits.
    - a. The strength of a habit is partially determined by the total number of times which a particular connection is made and rewarded.
    - b. If a particular response to a stimulus is not given to other stimuli as well, the relationship between the stimulus and the response will be strengthened.

c. The greater the amount of reward, the more the habit will tend to be strengthened.
d. Immediate reward upon responding enhances the likelihood of the retention of that response.
e. Responses which require less effort are more likely to be retained as compared to those which are hard to make.

3. Models of learning are similar or equivalent to models of communication.
a. A message can be thought of as a stimulus.
b. The decoding of a message involves the perception of it as a stimulus.
c. Encoding involves making an overt response to the stimulus as it is perceived and interpreted.
d. The interpretation of a stimulus is the process of operating as communication sources and receivers.

D. Interpersonal Communications focus primarily on the interdependence of the source and the receiver

1. There are varying levels of interdependence among communication processes.
a. Definitional-Physical Interdependence suggests the necessity of defining a source and a receiver, and that they rely on the physical existence of each other for the production or reception of messages.
b. Communication frequently involves an action-reaction interdependence in which the action of the source affects the reaction of the receiver, which in turn affects the subsequent reaction of the source, etc.
(1) Provides source with information regarding his success in accomplishing his objectives.
(2) Receiver exerts control over future messages of the source on the basis of the responses he makes.
c. Communicators carry with them sets of images and expectations regarding receivers--this prediction regarding receivers involves empathy, i.e., the ability to project ourselves into other people's personalities.
(1) S-R learning theorists argue that there is no such thing as empathy, that we cannot develop expectations of the internal psychological states of man.
(2) Inference theory suggests that man observes his own physical behavior, relates his behavior symbolically to his own internal psychological states (i.e., feelings, thoughts, emotions, etc.), and can make inferences about the internal states of others on the basis of his previous interpretations of himself.
(3) Role-taking theory of empathy relies on the concept of the generalized other, which is based on our experiences in specific social environments and in the successive roles of other people that we take as a part of the maturational, self-concept developmental process.
d. Interaction represents another level of interdependent complexity, and represents a process of reciprocal role-taking and of mutual performance of empathic behaviors.

    - (1) Interaction is the ideal, the goal of human communication.
    - (2) Much social behavior involves attempts to find substitutes for interaction, i.e., to find less energy-consuming bases for communication.

E. Social Factors operate to influence the communication process.

1. When we are not motivated in the communication situation, empathic accuracy decreases.
2. For a given role there is a set of behaviors which must be performed, and another set which is prohibited.
3. Norms refer to uniformities in behavior, on the part of group members, which is maintained by group pressures.
4. The kinds of goals and goal interdependences which groups emphasize determine, in part, the communication functions.
5. Social systems are produced through communication processes, and serve to set limits.
    - a. Development of role systems presumes previous communications among system members.
    - b. The range of receivers and the number of people with whom an individual transmits messages is limited.
    - c. The system determines the frequency of messages for a given individual.
    - d. Knowledge of a social system can help us make accurate predictions about individuals who operate within that system, and their patterns of communication.

F. Communications Breakdowns relates to the problems in predicitng behavior from the knowledge of social systems.

1. When prescriptions, descriptions and expectations of role behaviors differ significantly, communication breaks down.
2. Ignorance or dismissal of the importance of an individual's role position can result in serious breakdown in communication.
    - a. Ambiguity of authority interferes with the fidelity of communications.
    - b. A rigid authority-power structure can produce system stagnation and concomittant complexity in communication channels.
3. Individual may be using a different reference group as a determination of his behavior.
4. Role positions in one group may be antagonistic to the positions one occupies in other groups.
5. Communications across social systems are similarly affected by role behavior, allocation of authority, and differences in norms, values, beliefs, and language.

G. The Focus on Meaning in Communication relates to attending to the various aspects of the message as an ingredient of communication.
1. Meaning is related to the codes we choose in communicating, and in the languages we employ in encoding our messages.
    - a. Communication does not consist of the transmission of meanings.
        - (1) Messages, and not meanings are transferable.

b. Meanings are covert responses which are personal and learned.
  (1) Meanings are internal responses which individuals make to stimuli.
  (2) Meanings are not fixed, they change as a function of experience.
  (3) No two people can ever have exactly the same meaning for anything.
  (4) Peoples seem to learn meanings as a function of least effort, noninterference and discriminative capacity.

2. We learn words and acquire meanings for them by perceiving the word as related to other words, perceptions or objects for which we already have meanings.
3. Meanings are learned from oral sound combinations first, and much later for written words.
4. While personal meaning is emphasized, people do have common meanings for words and word-sequences.

a. Denotative meaning consists of a relationship between a word-sign and an object, it is concerned with the existence of objects in the physical world.

b. Structural meaning puts words together, it points out relationships.
  (1) We get meaning through structure when one word-sign enables us to predict another word-sign.
  (2) We get meaning through structure when two word-signs indicate something about their relationship (e.g., "John" and "run") which we could not get taking each word individually.
  (3) Structural meanings increase our ability to predict what is coming on the basis of what has occurred.

c. Contextual meaning represents a mixture of denotative and structural elements.
  (1) It is denotative in the sense that we attempt to derive meanings for terms which we do not already have meanings for.
  (2) It is structural in the sense that we predict denotative meaning from the relationships between those terms for which meanings already exist.

d. Connotative meaning can be defined as a relationship between a sign, an object, and a person.
  (1) These meanings are closely related to personal experiences.
  (2) The concern here is with social, rather than physical of formal reality.
  (3) These words may tell us a great deal about the person using them, since they indicate values, judgements, attitudes.
  (4) Denotative meanings are connotative meanings on which there is general agreement.
  (5) Fidelity of communication tends to decrease as connotation increases, but the readability and interest of messages goes up.

```
*OBJECTIVES     THE STUDENT CAN DESCRIBE SEVERAL WAYS IN WHICH EARLY         00317017
                EXPERIENCE RESEARCH IS TO BE CRITICALLY EVALUATED IN TERMS00317018
                OF METHODOLOGICAL PROBLEMS,                                  00317019
*PREREQUISITE NONE                                                           00317020
*EXPERIENCE     DISCUSS THE METHODOLOGICAL PROBLEMS CONFRONTING              00317011
                RESEARCHERS IN THE AREA OF EARLY EXPERIENCE,  INCLUDES       00317012
                MATERIAL RELATING TO DIFFICULTY IN DEFINITION OF TERMS,      00317013
                ESTABLISHMENT OF CRITERIAN FACTORS, VARIATIONS IN            00317014
                ASSESSMENT TECHNIQUES, AND THE RETROSPECTIVE NATURE OF       00317015
                MUCH INFANT DATA,                                            00317016
*SETTING        LARGE GROUP,  COLLEGE                                        00317010
*MATERIALS      BLANK                                                        00317005
*LEVEL          ALL GRADES                                                   00317008
*GENERAL        ALL CANDIDATES                                               00317007
*HOURS          1                                                            00317006
*EVALUATION     THE STUDENT DEVELOPS HIS OWN EXPERIMENTAL DESIGN FOR         00317021
                RESEARCH IN EARLY EXPERIENCE, AND APPLIES THE                00317022
                METHODOLOGICAL DIFFICULTIES DISCUSSED IN A CRITICAL          00317023
                FASHION TO HIS OWN DESIGN,                                   00317024
*FILE           EARLY EXPERIENCE  RESEARCH  METHODOLOGY PROBLEMS             00317009
*OBJECTIVES     THE STUDENT COMPARES MAJOR THEORIES OF EARLY EXPERIENCE,     00318017
                AND DETERMINES THE MANNER IN WHICH THEORIES CAN BE APPLIED00318018

                TO CASE MATERIAL,                                            00318019
*PREREQUISITE LECTURE MATERIAL ON PSYCHOANALYTIC AND LEARNING THEORY         00318020
                POSITIONS ON SEX-ROLE IDENTIFICATION,                        00318021
*EXPERIENCE     SMALL GROUP DISCUSSIONS WHICH CENTER ABOUT THE APPLICATION00318012
                OF PSYCHOANALYTIC AND LEARNING VIEWPOINTS REGARDING SEX      00318013
                ROLE ACQUISITION TO CASE HISTORY MATERIAL,  GROUP MEMBERS 00318014
                DETERMINE SEX-ROLE IDENTIFICATION AND ACCOUNT FOR IT IN      00318015
                TERMS OF EACH OF THESE TWO MAJOR THEORIES,                  00318016
*SETTING        SMALL GROUP (1-12 STUDENTS),  COLLEGE                        00318011
*MATERIALS      CASE HISTORIES                                               00318005
*LEVEL          ALL GRADES                                                   00318008
*GENERAL        ALL CANDIDATES                                               00318007
*HOURS          1                                                            00318006
*EVALUATION     EACH GROUP SUBMITS ITS FORMAL WRITTEN SUMMARIES ON THE       00318022
                CASES DISCUSSED,                                             00318023
*FILE           EARLY EXPERIENCE  SEX-ROLE  SMALL GROUP DISCUSSION ON        00318009
                PSYCHOANALYTIC + LEARNING THEORIES                           00318010

*OBJECTIVES     THE STUDENT CAN DESCRIBE AT LEAST ONE MAJOR ELEMENT WHICH 00319017
                CHARACTERIZES EACH STAGE,                                    00319018
*PREREQUISITE INTRODUCTORY LECTURE ON CONCEPTS AND CONCEPT ATTAINMENT,       00319019
*EXPERIENCE     DISCUSS PIAGET≠S VIEWS ON CONCEPT ATTAINMENT,  INCLUDES      00319011
                REFERENCES TO SENSORY-MOTOR, PREOPERATIONAL, CONCRETE,       00319012
                AND FORMAL OPERATIONS STAGES,  INCLUDE INTRODUCTORY          00319013
                MATERIAL ON THE MANNER IN WHICH THE COMPREHENSION OF         00319014
                CONCEPT ATTAINMENT CAN BE APPLIED TO CURRICULUM              00319015
                DEVELOPMENT,                                                 00319016
*SETTING        LARGE GROUP,  COLLEGE                                        00319010
*MATERIALS      BLANK                                                        00319005
*LEVEL          ALL GRADES                                                   00319008
*GENERAL        ALL CANDIDATES                                               00319007
*HOURS          1 1/2                                                        00319006
*EVALUATION     DEVELOP CURRICULA FOR A SPECIFIC TOPIC AREA AT EACH          00319020
                DEVELOPMENTAL STAGE WHICH INCLUDES THE INFORMATION           00319021
                OBTAINED ON CONCEPT ATTAINMENT,                              00319022
 FILE           PIAGET  CONCEPT-ATTAINMENT  CURRICULAR DEVELOPMENT           00319009

*OBJECTIVES     TO TRANSLATE FROM THEORY TO PRACTICE WITH RELATION TO        00320019
                CONCEPT FORMATION,                                           00320020
*PREREQUISITE LECTURE MATERIAL ON CONCEPTS IN GENERAL, AND ON PIAGET         00320021
                THEORY SPECIFICALLY,                                         00320022
*EXPERIENCE     PRESENT A SPECIFIC INSTANCE IN WHICH APPLICATION OF          00320011
                PIAGET≠S THEORY CAN BE APPLIED,  WITH REGARD TO THE          00320012
                FINDING + ON STAGES OF CONCEPT ATTAINMENT, THE TEACHING OF00320013
                PHYSICAL CONCEPTS FOR EXAMPLE SHOULD BE DETERMINED BY THE 00320014
                CHILD≠S COMPREHENSION OF QUANTITY, WEIGHT AND VOLUME IN   00320015
                SEQUENTIAL ORDER,  SCIENCE EXPERIMENTS DEALING WITH       00320016
                QUANTITY COULD BE INTRODUCED POSSIBLY AS EARLY AS AGES SIX00320017
                TO SEVEN, FOLLOWED BY EXPERIMENTS DEALING WITH WEIGHT,    00320018
*SETTING        LARGE GROUP,  COLLEGE                                     00320010
*MATERIALS      BLANK                                                     00320005
*LEVEL          ALL GRADES                                                00320008
*GENERAL        ALL CANDIDATES                                            00320007
*HOURS          15 MIN,                                                   00320006
*EVALUATION     TEACHERS DEVISE SPECIFIC SCIENCE EXPERIMENTS WHICH INCLUDE00320023
                THE SAME SCIENTIFIC PRINCIPLE BUT IS TAUGHT TO SIX,       00320024
                EIGHT, TEN, TWELVE + FOURTEEN YEAR OLDS,                  00320025
*FILE           CURRICULUM  SCIENCE  CONCEPTS                             00320009
```

```
*OBJECTIVES     THE STUDENT UNDERSTANDS THE NATURE OF A VARIETY OF        00321016
                LANGUAGE EXPRESSION.                                      00321017
*PREREQUISITE   INTRODUCTORY LECTURE MATERIAL ON THE DEVELOPMENTAL AND    00321018
                MATURATIONAL ASPECTS OF LANGUAGE DEVELOPMENT,             00321019
*EXPERIENCE     DISCUSS THE SOURCES OF VARIATION IN THE DEVELOPMENT OF    00321012
                LANGUAGE.  INCLUDED HERE ARE SEX DIFFERENCES,             00321013
                MULTILINGUALISM, MULTIPLE DIALECTS, COSIOLOGICAL FACTORS,  00321014
                PSYCHOLOGICAL CONSIDERATIONS AND STYLISTIC ASPECTS,       00321015
*SETTING        LARGE GROUP,  COLLEGE                                     00321011
*MATERIALS      BLANK                                                     00321005
*LEVEL          ALL GRADES                                                00321008
*GENERAL        ALL CANDIDATES                                            00321007
*HOURS          1                                                         00321006
*EVALUATION     DESCRIBE THREE FACTORS WHICH GO INTO DETERMINING THE      00321020
                VARIATIONS WE SEE IN THE DEVELOPMENT OF LANGUAGE,         00321021
*FILE           LANGUAGE  DEVELOPMENT  SOCIETY OF NATURALISTIC LANGUAGE   00321009
                EXPRESSION                                                00321010
```

```
*OBJECTIVES     THE STUDENT CAN IDENTIFY THE TWO MAJOR MODES OF DEFINING 00322017
                INTELLIGENCE, AND CAN BECOME ACQUAINTED WITH THE          00322018
                INADEQUACY OF CURRENT DEFINITIONS,                        00322019
*PREREQUISITE   NONE                                                      00322020
*EXPERIENCE     DISCUSS THE NATURE OF INTELLIGENCE AS AN INTRODUCTION TO  00322011
                THE TOPIC OF MENTAL RETARDATION.  DEFINE THE ISSUE AS TO  00322012
                THE CONTROVERSY SURROUNDING THE CONSIDERATION OF WHETHER  00322013
                INTELLIGENCE REPRESENTS A PSYCHOMETRIC OR COGNITIVE       00322014
                CONSTRUCT.  INCLUDE THE COGNITIVE AND PSYCHOMETRIC        00322015
                APPROACHES AND THE PROCESS-CONTENT DISTINCTION,           00322016
*SETTING        LARGE GROUPE,  COLLEGE                                    00322010
*MATERIALS      BLANK                                                     00322005
*LEVEL          ALL GRADES                                                00322008
*GENERAL        ALL CANDIDATES                                            00322007
*HOURS          1                                                         00322006
*EVALUATION     THE STUDENT DEVELOPS A DIAGNOSTIC PROCEDURE WHICH ATTEMPTS00322021
                TO EVALUATE INTELLECTUAL ABILITY ON THE BASIS OF          00322022
                COGNITIVE-PROCESS DIMENSIONS,                             00322023
*FILE           INTELLIGENCE  MENTAL RETARDATION  COGNITION               00322009
```

```
*OBJECTIVES     WORKERS IN THE FIELD TURN THEIR ATTENTION FROM            00323017
                SUPERFICIAL TEST CONTENT TO THE PROBLEMS OF COGNITION,    00323018
*PREREQUISITE   NONE                                                      00323019
*EXPERIENCE     DISCUSS THE PROCESS-CONTENT DISTINCTION IN INTELLECTUAL   00323012
                ASSESSMENT, INCLUDE THE DIFFICULTIES WHICH RELATE TO THE  00323013
                USE OF TEST SCORES ALONE AS AN INDEX OF RETARDATION, AND  00323014
                EMPHASIZE AND IDENTIFY THE COGNITIVE STRUCTURES AND       00323015
                PROCESSES WHICH GIVE RISE TO CONTENT,                     00323016
*SETTING        LARGE GROUP,  COLLEGE                                     00323011
*MATERIALS      BLANK                                                     00323005
*LEVEL          ALL GRADES                                                00323008
```

6

```
*GENERAL       ALL CANDIDATES                                         00323007
*HOURS         1                                                      00323006
*EVALUATION    COMPARE THE COGNITIVE STRUCTURES AND PROCESSES OF A    00323020
               SEVERELY RETARDED CHILD WITH THE ≠AVERAGE≠ CLASSROOM CHILD00323021
*FILE          RETARDATION  INTELLECTUAL ASSESSMENT  COGNITION        00323009
               DEVELOPMENT + ASSESSMENT                               00323010
```

```
*OBJECTIVES    THE STUDENT CAN DIFFERENTIATE THE DIFFERENCE BETWEEN THE  00324015
               ≠AVERAGE≠ CHILD AND THE RETARDATE WHO SEEMS TO BE MORE    00324016
               MOTIVATED TO AVOID FAILURE THAN ACHIEVE SUCCESS,          00324017
*PREREQUISITE  INTRODUCTORY LECTURES ON THE NATURE OF INTELLIGENCE AND   00324018
               THE PROCESS-CONTENT DISTINCTION,                          00324019
*EXPERIENCE    DISCUSS THE HIGH RATE OF EXPECTANCY OF FAILURE FOR THE    00324011
               RETARDATE, THAT FAILURE EXPERIENCES MAY PREVENT CHILDREN  00324012
               FROM LEARNING THROUGH PRACTICE WHICH, IN TURN, SERVES TO  00324013
               FURTHER RETARD INTELLIGENCE TEST SCORES,                  00324014
*SETTING       LARGE GROUP,  COLLEGE                                     00324010
*MATERIALS     BLANK                                                     00324005
*LEVEL         ALL GRADES                                                00324008
*GENERAL       ALL CANDIDATES                                            00324007
*HOURS         15 MIN                                                    00324006
*EVALUATION    DESCRIBE THE MOTIVATIONAL PATTERNS RELATED TO PERFORMANCE 00324020
               FOR ≠AVERAGE≠ AND RETARDED CHILDREN, WITH SPECIFIC        00324021
               REFERENCE TO SUCCESS AND FAILURE,                         00324022
*FILE          RETARDATION  MOTIVATION  INTELLIGENCE                     00324009
```

```
*OBJECTIVES    THE STUDENT DESCRIBES WAYS IN WHICH SOCIAL REINFORCEMENTS 00325017
               ARE PROVIDED IN A PRESCRIBED MANNER AND WHICH ARE         00325018
               ESSENTIAL IN THE FORMATION OF FINE DISCRIMINATIONS,       00325019
*PREREQUISITE  INTRODUCTORY MATERIAL AN FORMAL ASPECTS OF LEARNING THEORY00325020
               PARTICULARLY DEALING WITH CONCEPTS OF GENERALIZATION AND  00325021
               DISCRIMINATION,                                           00325022
*EXPERIENCE    EFFECTIVE SOCIAL LEARNING REQUIRES BOTH ADEQUATE          00325011
               GENERALIZATION AND SHARP DISCRMINATIONS,  SMALL GROUPS ARE00325012
               SET UP TO DISCUSS THE AREAS IN SOCIETY WHERE              00325013
               GENERALIZATIONS AND DISCRIMINATIONS ARE ESTABLISHED,  FOR 00325014
               EXAMPLE, THE HANDLING OF PHYSICAL AGGRESSION IN NORTH     00325015
               AMERICAN SOCIETY,                                         00325016
*SETTING       SMALL GROUP (1-12 STUDENTS),  COLLEGE                     00325010
*MATERIALS     BLANK                                                     00325005
*LEVEL         ALL GRADES                                                00325008
*GENERAL       ALL CANDIDATES                                            00325007
*HOURS         1                                                         00325006
*EVALUATION    THE GROUP IDENTIFIES WAYS IN WHICH SOCIETY REINFORCERS ARE00325023
               EMPLOYED TO SHAPE APPROPRIATE BEHAVIORS ESSENTIAL FOR     00325024
               EFFECTIVE SOCIAL FUNCTIONING,                             00325025
*FILE          SOCIAL LEARNING  GENERALIZATION  DISCRIMINATION           00325009
```

```
*OBJECTIVES    THE STUDENT CAN DIFFERENTIATE THE CONSEQUENCES OF VARIOUS 00326014
               FORMS OF EXTINCTION RESPONSES- IE, PUNISHMENT, NONREWARD  00326015
               AND WITHDRAWAL OF POSITIVE REINFORCES,                    00326016
*PREREQUISITE  INTORDUCTORY LECTURES ON SOCIAL LEARNING,                 00326017
*EXPERIENCE    DISCUSS THE RELATIVE EFFECTS OF PUNISHMENT AND NON-REWARD 00326011
               IN ANIMAL AND HUMAN LEARNING,  INCLUDE THE ELEMENTS       00326012
               ASSOCIATED WITH THE WITHOLDING OF POSITIVE REINFORCERS,   00326013
*SETTING       LARGE GROUP,  COLLEGE                                     00326010
*MATERIALS     BLANK                                                     00326005
*LEVEL         ALL GRADES                                                00326008
*GENERAL       ALL CANDIDATES                                            00326007
*HOURS         1                                                         00326006
*EVALUATION    A CONTRAST IN THE BEHAVIORS WHICH TYPICALLY EMERGE AS A   00326018
               FUNCTION OF THE USE OF THE THREE DIFFERENT TYPES OF       00326019
               TECHNIQUES WHEN USED IN A DISCIPLINARY MANNER,            00326020
*FILE          PUNISHMENT  NONREWARD  LEARNING THEORY                    00326009
```

```
*OBJECTIVES     THE STUDENT IDENTIFIES THE WAYS IN WHICH BIOLOGICAL          00327018
                VARIABLES INTERACT WITH SOCIAL=LEARNING; THE STUDENT         00327019
                CONTRACTS THE IMPACT OF INTELLECTUAL CAPACITY ON THE         00327020
                SOCIAL DEVELOPMENT OF LOWER AND HIGHER I Q CHILDREN,         00327021
*PREREQUISITE   MODULES 325 AND 326                                          00327022
*EXPERIENCE     DISCUSS THE MANNER IN WHICH BIOLOGICAL VARIABLES INTERACT    00327011
                WITH THE SOCIAL-LEARNING PROCESS=PATTERNS OF SOCIAL REWARD00327012
                MAY BE PARTLY DETERMINED BY BOTH THE TYPE OF PHYSICAL        00327013
                CHARACTERISTICS AND BY THE TIMING IN PHYSICAL CHANGES AS     00327014
                COMPARED TO AGE-MATES; GENETIC FACTORS SET LIMITS ON AN      00327015
                INDIVIDUAL≠S INTELLECTUAL CAPACITY WHICH INFLUENCE THE       00327016
                RELATIVE PROPORTION OF SUCCESS EXPERIENCES HE WILL HAVE,     00327017
*SETTING        LARGE GROUP,  COLLEGE                                        00327010
*MATERIALS      BLANK                                                        00327005
*LEVEL          ALL GRADES                                                   00327008
*GENERAL        ALL CANDIDATES                                               00327007
*HOURS          1/2                                                          00327006
*EVALUATION     COMPARE THE WAYS IN WHICH PHYSICAL CHARACTERISTICS AND THE00327023
                TIMING IN PHYSICAL CHANGE EFFECTS SOCIAL DEVELOPMENT,        00327024
                DESCRIBE THE MANNER IN WHICH INHERITED INTELLECTUAL          00327025
                CAPACITIES RELATE TO SUCCESS EXPERIENCES IN LIFE,            00327026
*FILE           BIOLOGICAL CONSTITUTION  SOCIAL REWARD  SOCIAL LEARNING      00327009
```

```
*OBJECTIVES     THE STUDENT PERSONALIZES THE THEORETICAL CONCEPTS            00328014
                RELATED TO PHYSICAL DEVELOPMENT AND SOCIAL REWARD,           00328015
*PREREQUISITE   MODULE 327                                                   00328016
*EXPERIENCE     STUDENT WRITES AND ESSAY TO DESCRIBE THE IMPACT OF GENETIC00328011
                DEVELOPMENT AND THE TIMING OF PHYSICAL CHANGE ON HIS OWN     00328012
                PARTICULAR PERSONALITY DEVELOPMENT,                          00328013
*SETTING        INDEPENDENT,  BLANK                                          00328010
*MATERIALS      BLANK                                                        00328005
*LEVEL          ALL GRADES                                                   00328008
*GENERAL        ALL CANDIDATES                                               00328007
*HOURS          1                                                            00328006
*EVALUATION     THE STUDENT DESCRIBES AND IDENTIFIES THE SPECIFIC            00328017
                PHYSICAL ATTRIBUTES WHICH HAVE INFLUENCED HIS OWN            00328018
                PARTICULAR SOCIAL DEVELOPMENT,                               00328019
*FILE           CONSTITUTION  SOCIAL REWARD  PERSONALITY DEVELOPMENT         00328009
```

```
*OBJECTIVES     THE STUDENT IDENTIFIES ONE MANNER IN WHICH HIS BEHAVIOR AS00329017
                A TEACHER CAN ACT TO REDUCE PUPIL BEHAVIOR WHICH IS          00329018
                INITIALLY RANDOM,                                            00329019
*PREREQUISITE   NONE                                                         00329020
*EXPERIENCE     DISCUSS MILLER AND DOLLARD≠S THEORY OF IMITATION; INCLUDE00329011
                THE ELEMENTS THAT THE NECESSARY CONDITIONS FOR LEARNING      00329012
                THROUGH IMITATION INCLUDE A MOTIVATED SUBJECT WHO IS         00329013
                POSITIVELY REWARDED FOR MATCHING THE RESPONSES OF A MODEL    00329014
                DURING AN INITIAL SERIES OF RANDOM, TRIAL-AND=ERROR          00329015
                RESPONSES,                                                   00329016
*SETTING        LARGE GROUPE,  COLLEGE                                       00329010
*MATERIALS      BLANK                                                        00329005
*LEVEL          ALL GRADES                                                   00329008
*GENERAL        ALL CANDIDATES                                               00329007
*HOURS          1                                                            00329006
*EVALUATION     THE STUDENT DESCRIBES THE BEHAVIORAL SEQUENCES IN A          00329021
                CLASSROOM SETTING WHICH ARE REFINED FROM RANDOM TO           00329022
                SPECIFIC RESPONSES DUE TO THE TEACHER≠S MODEL FUNCTION,      00329023
*FILE           MILLER + DOLLARD  IMITATION  MODELING                        00329009
```

```
*OBJECTIVES     THE PARTICIPANTS IDENTIFY THE EFFECTIVENESS OF THE METHOD 00330014
```

```
               OF CHANGING BEHAVIOR, SINCE THE PLAYER DEPENDENTLY          00330015
               ACCEPTS THE TASK AND IS THEN USUALLY REINFORCED FOR         00330016
               PRODUCING THE DESIRED BEHAVIOR,                             00330017
*PREREQUISITE DISCUSSIONS OF LEARNING THEORY, IMITATION, AND               00330018
               IDENTIFICATION,                                             00330019
*EXPERIENCE    SMALL GROUPS ARE SET UP FOR ROLE-PLAYING PURPOSES,          00330011
               SUBJECTS REPRODUCE THE BEHAVIOR OF REAL-LIFE OR SYMBOLIC    00330012
               MODELS,                                                     00330013
*SETTING       SMALL GROUP (1-12 STUDENTS),  COLLEGE                       00330010
*MATERIALS     VIDEOTAPE                                                   00330005
*LEVEL         ALL GRADES                                                  00330008
*GENERAL       ALL CANDIDATES                                              00330007
*HOURS         2                                                           00330006
*EVALUATION    GROUP RESPONSE TO VIDEOTAPE AS TO HOW WELL THE PLAYER       00330020
               PRACTICED HIS ASSIGNED ROLE;  DISCUSSION OF THE FEELINGS    00330021
               WHICH SERVED TO PRESSURE THE PLAYER IN THE DIRECTION OF     00330022
               ACCEPTING THE ROLE HE PLAYS,                                00330023
*FILE          ROLE-PLAYING  IDENTIFICATION  SMALL GROUPS                  00330009

*OBJECTIVES    THE STUDENT CAN DESCRIBE AT LEAST TWO WAYS IN WHICH         00340015
               ANALYTIC AND LEARNING THEORISTS ACCOUNT FOR DEVIANT         00340016
               BEHAVIOR,                                                   00340017
*PREREQUISITE UNDERSTANDS BASIC ANALYTIC AND LEARNING THEORY CONCEPTS,     00340018
*EXPERIENCE    DEVIANT BEHAVIOR IS DISCUSSED IN TERMS OF THE               00340011
               PSYCHOANALYTIC CONCEPT OF INTROPSYCHIC CONFLICTS AND IN     00340012
               TERMS OF LEARNING THEORY WHICH VIEWS DEVIANT BEHAVIOR AS A00340013
               RESULT OF INTERMITTENT POSITIVE REINFORCEMENT,              00340014
*SETTING       LARGE GROUP,  COLLEGE                                       00340010
*MATERIALS     BLANK                                                       00340005
*LEVEL         ALL GRADES                                                  00340008
*GENERAL       ALL CANDIDATES                                              00340007
*HOURS         1                                                           00340006
*EVALUATION    THE STUDENT COMPARES THE TWO VIEWS BY ACCOUNTING FOR        00340019
               DEVIANT BEHAVIOR IN CASE HISTORIES ACCORDING TO EACH        00340020
               THEORETICAL POINT OF VIEW,                                  00340021
*FILE          PSYCHOANALYTIC THEORY  LEARNING THEORY  DEVIANCE            00340009

*OBJECTIVES    THE STUDENT CAN IDENTIFY BEHAVIOR WHICH SEEMS TO MAINTAIN 00341015
               ITSELF AS A MEANS OF REDUCING ANXIETY,                      00341016
*PREREQUISITE BASIC ASPECTS OF LEARNING THEORY-EQ,, REINFORCEMENT,         00341017
               AVOIDANCE CONDITIONING,                                     00341018
*EXPERIENCE    DISCUSS THE RESISTANCE OF ANXIETY-MOTIVATED DEVIANT         00341011
               BEHAVIOR TO CHANGE;  THE REINFORCING ELEMENTS OF AVOIDANCE00341012
               BEHAVIOR IN FEARFUL SOCIAL SITUATIONS ARE SEEN IN TERMS OF00341013
               ANXIETY REDUCTION,                                          00341014
*SETTING       LARGE GROUP,  COLLEGE                                       00341010
*MATERIALS     BLANK                                                       00341005
*LEVEL         ALL GRADES                                                  00341008
*GENERAL       ALL CANDIDATES                                              00341007
*HOURS         1/2                                                         00341006
*EVALUATION    THE STUDENT WRITES A PERSONAL ESSAY WHICH DEFINES CURRENT 00341019
               PATTERNS OF HIS OWN BEHAVIOR WHICH ARE BEING MAINTAINED     00341020
               DUE TO AN ATTEMPT TO REDUCE ANXIETY,                        00341021
*FILE          DEVIANCE  AVOIDANCE  ANXIETY                                00341009

*OBJECTIVES    THE STUDENT CAN IDENTIFY THE PROCEDURE THROUGH WHICH        00342016
               RELAXATION RESPONSES IN THE PRESENCE OF FEAR-AROUSING       00342017
               STIMULI SERVE TO MODIFY THE ANXIETY RESPONSE                00342018
```

```
*PREREQUISITE UNDERSTANDS PRINCIPLES OF CLASSICAL CONDITIONING,       00342019
              AVOIDANCE BEHAVIOR, AND DESENSITIZATION                 00342020
*EXPERIENCE   LISTEN TO LANGORUS TAPE ON DESENSITIZATION PROCEDURES   00342012
              WHICH IS PART OF THE ≠SIX MODERN THERAPIES≠ SERIES,     00342013
              DISCUSS HOW COUNTERCONDITIONING IS EMPLOYED AS A TECHNIQUE00342014
              TO REDUCE ANXIETY OR FEAR RESPONSES,                    00342015
*SETTING      INDEPENDENT,  COLLEGE                                   00342011
*MATERIALS    TAPE: ≠SIX MODERN THERAPIES≠-BEHAVIOR MODIFICATION      00342005
*LEVEL        ALL GRADES                                              00342008
*GENERAL      ALL CANDIDATES                                          00342007
*HOURS        1 1/2                                                   00342006
*EVALUATION   DESCRIBE THE MANNER IN WHICH ANXIETY IS REDUCED WHEN    00342021
              RESPONSES THAT ARE INCOMPATIBLE WITH ANXIETY OR FEAR ARE 00342022
              ELICITED IN THE PRESENCE OF THE FEAR-AROUSING STIMULI,  00342023
*FILE         BEHAVIOR MODIFICATION  COUNTERCONDITIONING  ANXIETY     00342009
              REDUCTION                                               00342010
```

```
*OBJECTIVES   THE STUDENT CAN IDENTIFY WAYS IN WHICH MODELING BEHAVIOR 00343018
              CAN BE EFFECTIVE IN MODIFYING BEHAVIOR OF OVER-INHIBITED 00343019
              AND AGGRESSIVE, REBELLIOUS CHILDREN,                    00343020
*PREREQUISITE UNDERSTANDS BASIC THEORY OF CLASSICAL CONDITIONING, AND 00343021
              INSTRUMENTAL LEARNING,                                  00343022
*EXPERIENCE   VIEW THE FILM ≠ACTIVITY GROUP THERAPY,≠ DISCUSS THE     00343012
              MANNER IN WHICH THE LEADER ELICITS AND CONTROLS BEHAVIOR 00343013
              THROUGH THE PROVISION OF MODELS,  FOR EXAMPLE, WHEN THE 00343014
              THERAPIST GIVES FOOD TO A CONFORMIST, AGGRESSIVE BOYS   00343015
              EVENTUALLY FOLLOW WHEN THEY SEE THAT THE CONFORMERS ARE 00343016
              REWARDED BY APPROVAL, INTEREST, AND FOOD                00343017
*SETTING      LARGE GROUP,  COLLEGE                                   00343011
*MATERIALS    FILM: ≠ACTIVITY GROUP THERAPY,≠ S R SLAVSON, COLUMBIA   00343005
              UNIVER. PRESS, NEW YORK                                 00343006
*LEVEL        ALL GRADES                                              00343009
*GENERAL      ALL CANDIDATES                                          00343008
*HOURS        1 1/2                                                   00343007
*EVALUATION   COMPARE MODELING PROCEDURES WITH THOSE OF AVOIDANCE     00343023
              CONDITIONING WITH RESPECT TO A SERIES OF SPECIFIC       00343024
              BEHAVIORS TO BE MODIFIED,                               00343025
*FILE         BEHAVIOR MODIFICATION  MODELING  LEADER BEHAVIOR IN GROUPS00343010
```

```
*OBJECTIVES   THE STUDENT UNDERSTANDS CLASS INFLUENCES WHICH GO INTO  00344017
              DETERMINING OVERT BEHAVIORAL CHARACTERISTICS IN VARIOUS 00344018
              INDIVIDUALS,                                            00344019
*PREREQUISITE NONE                                                    00344020
*EXPERIENCE   DISCUSS THE DIFFERENCES BETWEEN MIDDLE AND LOWER CLASS  00344011
              PARENTAL EMPHASES-INDICATE HOW MIDDLE-CLASS ORIENTATIONS 00344012
              STRESSING FUTURE, ACHIEVEMENT, COMPETITION, AND         00344013
              SELF-CONTROL CONTRAST WITH LOWER-CLASS ORIENTATIONS TOWARD00344014
              OBEDIENCE, NEATNESS, AND ADHERENCE TO EXTERNALLY IMPOSED 00344015
              RULES,                                                  00344016
*SETTING      LARGE GROUP,  COLLEGE                                   00344010
*MATERIALS    BLANK                                                   00344005
*LEVEL        ALL GRADES                                              00344008
*GENERAL      ALL CANDIDATES                                          00344007
*HOURS        1/2                                                     00344006
*EVALUATION   THE STUDENT HAS TO IDENTIFY AS MIDDLE-OR LOWER-CLASS,   00344021
              SEVERAL CHARACTERIZATIONS OF INDIVIDUALS, AND DESCRIBE  00344022
              SPECIFICALLY WHICH ELEMENTS WERE USED TO CATEGORIZE THE 00344023
              SKETCHES PRESENTED,                                     00344024
*FILE         CLASS DIFFERENCES  FAMILY STRUCTURE  SOCIALIZATION      00344009
```

```
*OBJECTIVES    THE STUDENT CAN COME TO IDENTIFY THE TASKS WHICH THE        00345016
               FAMILY MUST SUCCESSFULLY CARRY OUT FOR THE CHILD TO EMERGE00345017
               AS A SOCIALLY MATURE AND ADEQUATE INDIVIDUAL,              00345018
*PREREQUISITE NONE                                                        00345019
*EXPERIENCE    DISCUSS THE PROCESSES AND TASKS OF SOCIALIZATION,  THE     00345011
               FAMILY SERVES INITIALLY TO PROTECT AND NURTURE;  SERVES TO00345012
               CHANNEL AGGRESSIVE AND IMPULSIVE BEHAVIOR;  PROMOTES       00345013
               PHYSICAL, COGNITIVE, AND SOCIAL SKILLS;  HELPS DEVELOP     00345014
               LANGUAGE AND A SENSE OF SELF,                              00345015
*SETTING       LARGE GROUP,  COLLEGE                                      00345010
*MATERIALS     BLANK                                                      00345005
*LEVEL         ALL GRADES                                                 00345008
*GENERAL       ALL CANDIDATES                                             00345007
*HOURS         1/2                                                        00345006
*EVALUATION    DESCRIBE THE IMPORTANT ELEMENTS WHICH THE FAMILY MUST      00345020
               SUCCESSFULLY ACHIEVE WITH THE CHILD IN THE PROCESS OF      00345021
               SOCIALIZATION-SOME SPECIFIC REFERENCE SHOULD BE MADE TO    00345022
               AGGRESSIVE, COGNITIVE, SOCIAL, LINGUISTIC, AND ≠SELF≠      00345023
               ASPECTS OF BEHAVIOR,                                       00345024
*FILE          SOCIALIZATION  SELF-DEVELOPMENT  FAMILY INVOLVEMENT        00345009
```

```
*OBJECTIVES    THE TEACHER CAN DESCRIBE WAYS IN WHICH THE PERSONALITY     00346018
               CHARACTERISTICS OF THE INDIVIDUAL INTERACT WITH GROUP      00346019
               PROCESSES, AND PRODUCES SOME SPECIFIC RESULTS,             00346020
*PREREQUISITE NONE                                                        00346021
*EXPERIENCE    DISCUSS THE MANNER IN WHICH CLASSROOM STRUCTURE APPLIES TO00346011
               THE CHILD WITH LIMITED HEALTH, INTELLECT OR INTERPERSONAL  00346012
               SKILLS IN CIRCULAR FASHION,  THE CHILD≠S LOW LEVEL OF      00346013
               SELF-ESTEEM AND RELATIVELY HIGH ANXIETY WILL CAUSE HIM TO  00346014
               INTERACT AWKWARDLY WITH TEACHERS AND PEERS WHICH IN TURN   00346015
               PRODUCE RESPONSES OF RESTRAINED EMBARRASSMENT OR EVEN      00346016
               OUTRIGHT RIDICULE, WHICH FURTHER LOWERS SELF-ESTEEM,       00346017
*SETTING       LARGE GROUP,  COLLEGE                                      00346010
*MATERIALS     BLANK                                                      00346005
*LEVEL         ALL GRADES                                                 00346008
*GENERAL       ALL CANDIDATES                                             00346007
*HOURS         15 MIN                                                     00346006
*EVALUATION    DESCRIBE THE WAYS IN WHICH A GROUP MIGHT REACT TO A        00346022
               HOSTILE, A WITHDRAWN, AND A SELF-CONFIDENT CHILD, DESCRIBE00346023
               THE CIRCULAR INTERACTIVE PROCESS BETWEEN THE INDIVIDUAL    00346024
               AND THE GROUP FOR EACH OF THESE THREE TYPES OF CHILDREN,   00346025
*FILE          CLASSROOM STRUCTURE  PERSONALITY  SELF-ESTEEM              00346009
```

```
*OBJECTIVES    THE STUDENT CAN CONTRAST THE RESULTS OF A RIGID VS, A MORE00347019
               FLEXIBLE USE OF TEACHER POWER, ESPECIALLY IN TERMS OF      00347020
               PATTERNS OF INTERPERSONAL RELATIONS IN THE GROUP,          00347021
*PREREQUISITE NONE                                                        00347022
*EXPERIENCE    HAVE STUDENTS ROLE-PLAY CLASSROOM SETTING WITH TWO         00347011
               DIFFERENT TYPES OF TEACHERS:  1 MAINTAINS POWER OVER THE   00347012
               GROUP AND DOES NOT DISTRIBUTE IT;2 TEACHER DELEGATES       00347013
               POWERS TO STUDENTS, AND ACCEPTS THEM EMOTIONALLY,  DISCUSS00347014
               HOW THE LATTER METHOD STIMULATES GREATER PUPIL-TO-PUPIL    00347015
               INTERACTION, REDUCES INTER-PERSONAL CONFLICTS AND          00347016
               ANXIETIES, AND INCREASES MUTUAL ESTEEM, RAPPORT AND        00347017
               SELF-ESTEEM,                                               00347018
*SETTING       SMALL GROUP (1-12 STUDENTS),  COLLEGE                      00347010
*MATERIALS     BLANK                                                      00347005
```

```
*OBJECTIVES     THE STUDENT UNDERSTANDS THE MAIN SOURCES OF THE              00349015
                ADOLESCENTS# FEELINGS ABOUT SCHOOL                           00349016
*PREREQUISITE   MODULES 347 + 348                                            00349017
*EXPERIENCE     DISCUSS SOURCES OF ADOLESCENT SELF-ESTEEM IN THE SCHOOL      00349011
                SYSTEM-DESCRIBE FRIENDSHIP AND STATUS FACTORS WHICH ARE      00349012
                ACHIEVED AMONG SCHOOLMATES;  DESCRIBE FACTORS RELATED TO     00349013
                ACADEMIC ACHIEVEMENT                                         00349014
*SETTING        LARGE GROUP,  COLLEGE                                        00349010
*MATERIALS      BLANK                                                        00349005
*LEVEL          ALL GRADES                                                   00349008
*GENERAL        ALL CANDIDATES                                               00349007
*HOURS          1/2                                                          00349006
*EVALUATION     DESCRIBE TWO MAJOR FACTORS WHICH GO INTO DETERMINING THE     00349018
                ADOLESCENTS# ATTITUDE TOWARD SCHOOL ATTENDANCE               00349019
*FILE           ADOLESCENCE  SELF-ESTEEM  SCHOOL FUNCTIONS                   00349009
________________________________________________________________________________________

*OBJECTIVES     THE STUDENT CAN DESCRIBE AT LEAST ONE MANNER IN WHICH        00350018
                HOMEOSTATIC PRINCIPLES ARE ACCOUNTED FOR IN PHYSIOLOGICAL,00350019
                PSYCHOLOGICAL AND SOCIOLOGICAL VIEWS,                        00350020
*PREREQUISITE   INTRODUCTION TO THE CONCEPT OF DRIVE REDUCTION,              00350021
*EXPERIENCE     DISCUSS THE PRINCIPLE OF HOMEOSTASIS, AND THE MANNER IN      00350011
                WHICH THIS TERM HAS BEEN APPLIED TO PHYSIOLOGICAL,           00350012
                PSYCHOLOGICAL AND SOCIOLOGICAL ASPECTS OF BEHAVIOR,          00350013
                INDICATE SOME OF THE DIFFICULTIES WITH THE CONCEPT, AND      00350014
                EMPHASIZE THE LACK OF AGREEMENT CONCERNING THE               00350015
                APPLICABILITY OF THE CONCEPT, PARTICULARLY WITH REGARD TO    00350016
                PERSONALITY AND SOCIAL ORGANIZATION,                         00350017
*SETTING        LARGE GROUP,  COLLEGE                                        00350010
*MATERIALS      BLANK                                                        00350005
*LEVEL          ALL GRADES                                                   00350008
*GENERAL        ALL CANDIDATES                                               00350007
*HOURS          1                                                            00350006
*EVALUATION     DESCRIBE ONE ASPECT OF YOUR DAY-TO-DAY LIVING, IN TERMS OF00350022
                PHYSIOLOGICAL, PSYCHOLOGICAL, AND SOCIOLOGICAL FUNCTIONS,    00350023
                WHICH SERVES AS A MEANS OF HOMEOSTATIC OPERATIONS,           00350024
*FILE           HOMEOSTASIS  DRIVE-REDUCTION  MOTIVATION                     00350009
________________________________________________________________________________________

*OBJECTIVES     THE STUDENT CAN IDENTIFY WAYS IN WHICH PSYCHOLOGICAL AND     00351019
                ENVIRONMENTAL FACTORS INTERACT TO CREAT A TENSION-FIELD      00351020
                WHICH TENDS TO MAINTAIN A BALANCE,                           00351021
*PREREQUISITE   INTRODUCTORY MATERIAL ON HOMEOSTASIS AND FIELD THEORY,       00351022
*EXPERIENCE     DISCUSS ONE ASPECT OF LEWIN#S FIELD THEORY-THE               00351011
                INTERRELATION OF TENSION SYSTEMS AND THE RESULTANT           00351012
                INTERACTION OF FORCES IN THE PSYCHOLOGICAL ENVIRONMENT,      00351013
                INDICATE THE MANNERISM WHICH A FIELD OF FORCES IS CREATED-00351014
                SINCE MORE THAN ONE SYSTEM MAY BE IN A STATE OF TENSION      00351015
                SIMULTANEOUSLY, AND SINCE THESE SYSTEMS MAY BE POSITIVELY    00351016
                OR NEGATIVELY RELATED TO ONE OR MORE VALENCES IN THE         00351017
                ENVIRONMENT, FIELD FORCES ARE CREATED,                       00351018
*SETTING        LARGE GROUP,  COLLEGE                                        00351010
*MATERIALS      BLANK                                                        00351005
*LEVEL          ALL GRADES                                                   00351008
*GENERAL        ALL CANDIDATES                                               00351007
```

```
*HOURS          1                                                       00351006
*EVALUATION     DIAGRAM A SITUATION IN WHICH A CHILD IS REQUIRED TO EAT   00351023
                DISLIKED FOOD-INDICATE HOW THE FORCE AWAY FROM REAL EATING00351024
                VARIES AS A FUNCTION OF THE DISTANCE BETWEEN THE CHILD    00351025
                AND HIS HAVING TO EAT THE FOOD;  INDICATE THE CHANGE IN   00351026
                THE DIRECTION OF FORCES AFTER THE CHILD HAS STARTED EATING00351027
*FILE           LEWIN  HOMEOSTASIS  FIELD FORCES                          00351009
```

```
*OBJECTIVES     THE STUDENT CAN IDENTIFY SEVERAL WAYS IN WHICH REACTIONS  00352016
                TO FRUSTRATION CAN BE MANIFESTED, BEHAVIOR PATTERNS,      00352017
*PREREQUISITE   FAMILIARITY WITH DRIVE-REDUCTION AND FREUDIAN THEORY,     00352018
*EXPERIENCE     DESCRIBE THE MOST COMMON REACTIONS TO CONTINUED           00352011
                FRUSTRATION-PRESENTATION INCLUDES MILLER AND DOLLARD≠S    00352012
                AGGRESSION HYPOTHESIS;  REGRESSION THEORIES OF FREUD;     00352013
                REPRESSION DESCRIBED IN ROSENYWEIG≠S EXPERIMENTS;  NAIER≠S00352014
                FIXATION CONCEPTS,                                        00352015
*SETTING        LARGE GROUP,  COLLEGE                                     00352010
*MATERIALS      BLANK                                                     00352005
*LEVEL          ALL GRADES                                                00352008
*GENERAL        ALL CANDIDATES                                            00352007
*HOURS          1                                                         00352006
*EVALUATION     THE STUDENT IS PRESENTED WITH A CASE HISTORY WHICH        00352019
                INCLUDES REPEATED ASPECTS OF FRUSTRATION;  HE IS ASKED TO 00352020
                DESCRIBE, AND THEORETICALLY ACCOUNT FOR, AT LEAST THREE  00352021
                POSSIBLE REACTION PATTERNS WHICH MIGHT BE MANIFESTED,     00352022
*FILE           FRUSTRATION  AGGRESSION  REGRESSION                       00352009
```

```
*OBJECTIVES     THE STUDENT CAN IDENTIFY THE DOUBLE NEGATIVE AND DOUBLE   00353016
                POSITIVE ASPECTS OF THIS PARTICULAR CONFLICT SITUATION,   00353017
*PREREQUISITE   PRIOR DISCUSSION OF APPROACH,APPROACH, AVOIDANCE-AVOIDANCE00353018
                AND APPROACH-AVOIDANCE CONFLICTS,                         00353019
*EXPERIENCE     AN EXAMPLE OF DOUBLE-APPROACH-AVOIDANCE CONFLICT IS       00353011
                DIAGRAMMED,  ACHILD (C) WISHES (+) TO CLIMB A TREE,  HE IS00353012
                AFRAID (-) OF BEING HURT,  HIS FRIENDS ARE PRESENT,  THE  00353013
                CHILD GAINS PRESTIGE (+) IF HE SUCCEEDS, RECEIVES RIDICULE00353014
                (-) IF HE MAKES THE ATTEMPT AND FAILS,                    00353015
*SETTING        LARGE GROUP,  COLLEGE                                     00353010
*MATERIALS      BLANK                                                     00353005
*LEVEL          ALL GRADES                                                00353008
*GENERAL        ALL CANDIDATES                                            00353007
*HOURS          15 MIN                                                    00353006
*EVALUATION     THE STUDENT IDENTIFIES AT LEAST TWO INSTANCES IN HIS OWN 00353020
                LIFE WHEN HE WAS INVOLVED IN A DOUBLE APPROACH-AVOIDANCE  00353021
                CONFLICT                                                  00353022
*FILE           CONFLICT  APPROACH-AVOIDANCE  MOTIVATION                  00353009
```

```
*OBJECTIVES     THE STUDENT CAN DESCRIBE THE WAY IN WHICH EVALUATION      00354016
                INTERACTS WITH ANXIETY TO AFFECT PERFORMANCE,             00354017
*PREREQUISITE   INTRODUCTORY LECTURES ON MOTIVATION                       00354018
*EXPERIENCE     DISCUSS RESEARCH EVIDENCE WHICH INDICATES THE NATURE OF   00354011
                THE INTERACTION BETWEEN ANXIETY AND EVALUATION-HIGH       00354012
                ANXIETY SUBJECT RESPOND TO EVALUATION WITH RESPONSES      00354013
                WHICH INTERFERE WITH SUBSEQUENT PERFORMANCE, WHERAS LOW  00354014
                ANXIETY GROUPS TEND TO BE ENERGIZED BY SUCH EVALUATION,   00354015
*SETTING        LARGE GROUP,  COLLEGE                                     00354010
*MATERIALS      BLANK                                                     00354005
*LEVEL          ALL GRADES                                                00354008
*GENERAL        ALL CANDIDATES                                            00354007
```

```
*HOURS         15 MIN                                                  00354006
*EVALUATION    CHARACTERIZE A HIGHLY-ANXIOUS GROUP, AND ASK THE STUDENT  00354019
               TO PREDICT FUTURE PERFORMANCE ON A TASK GIVEN THE GROUP IS00354020
               UNDER A CONDITION OF EVALUATION OR NON-AVALUATION,       00354021
*FILE          ANXIETY  EVALUATION  MOTIVATION                          00354009
```

```
*OBJECTIVES    THE STUDENT CAN IDENTIFY THE INTERACTION OF HIGH AND LOW  00355018
               NEED ACHIEVEMENT WITH THE TYPE OF TASK, AND THE MANNER IN 00355019
               WHICH THIS INTERACTION AFFECTS RECALL OF COMPLETED AND    00355020
               INTERRUPTED TASKS,                                        00355021
*PREREQUISITE  NONE                                                      00355022
*EXPERIENCE    DISCUSS THE ZEIGARNIK EFFECT, IN WHICH THE RECALL FOR     00355011
               INCOMPLETE TASKS IS BETTER THAN IT IS FOR COMPLETED TASKS,00355012
               INDICATE THAT HIGH-NEED ACHIEVERS TEND TO RECALL MORE     00355013
               INCOMPLETE THAN COMPLETE TASKS UNDER CONDITIONS OF        00355014
               EGO-INVOLVEMENT WITH SMALL DIFFERENCES UNDER TASK AND     00355015
               RELAXED CONDITIONS, WHILE THE REVERSE IS TRUE FOR LOW     00355016
               NEED-ACHIEVERS                                            00355017
*SETTING       LARGE GROUP,  COLLEGE                                     00355010
*MATERIALS     BLANK                                                     00355005
*LEVEL         ALL GRADES                                                00355008
*GENERAL       ALL CANDIDATES                                            00355007
*HOURS         1/2                                                       00355006
*EVALUATION    COMPARE THE RECALL OF COMPLETED AND INTERRUPTED TASKS FOR 00355023
               HIGH-AND LOW-NEED ACHIEVEMENT GROUPS WORKING UNDER        00355024
               RELAXED CONDITIONS                                        00355025
*FILE          ZEIGARNIK EFFECT  NEED ACHIEVEMENT  MOTIVATION            00355009
```

```
*OBJECTIVES    THE STUDENT ESTABLISHES THAT WHILE COMPETITIVE            00356015
               SITUATIONS MAY INCREASE SPEED OR QUANTITY OF WORK, THERE  00356016
               IS NO SUCH INCREASE IN QUALITY                            00356017
*PREREQUISITE  NONE                                                      00356018
*EXPERIENCE    SET UP COMPETITIVE GROUPS WHICH ARE REQUIRED TO WORK ON   00356011
               THE SAME TASK-INDIVIDUALS ACTIVELY COMPETE AGAINST EACH   00356012
               OTHER,  AFTERWARDS HAVE THE SAME GROUPS WORK COOPERATIVELY00356013
               FOR GOAL ACHIEVEMENT                                      00356014
*MATERIALS     BLANK                                                     00356005
*SETTING       SMALL GROUP (1-12 STUDENTS),  COLLEGE                     00356010
*LEVEL         ALL GRADES                                                00356008
*GENERAL       ALL CANDIDATES                                            00356007
*HOURS         1 1/2                                                     00356006
*EVALUATION    DURING DISCUSSION THE ESSENTIAL ASPECTS OF QUANTITY AND   00356019
               QUALITY UNDER BOTH CONDITIONS IS DEFINED BY THE GROUP OR  00356020
               POINTED OUT BY THE INSTRUCTOR IF IT FAILS TO EMERGE       00356021
               SPONTANEOUSLY                                             00356022
*FILE          GROUPS  COMPETITION  COOPERATION                          00356009
```

```
*OBJECTIVES    THE STUDENT UNDERSTANDS THAT AT LEAST SOME MOTIVES ARE    00357023
               GENERATED IN SOCIAL ENVIRONMENTS, AND THAT AGGRESSIVE     00357024
               RESPONSES ARISE AS A FUNCTION OF THE LOSS OF POWER        00357025
*PREREQUISITE  NONE                                                      00357026
*EXPERIENCE    REPEAT AN EXPERIMENT OF HOROWITZ-SET UP SMALL GROUPS OF   00357011
               STUDENTS AND GIVE THEM TASK OF MAKING SOME OBJECT UNDER   00357012
               TEACHER GUIDANCE,  PRIOR TO ENGAGING INTHE TASK, ONE      00357013
               GROUP HAD POWER AS TO PROCEDURE VESTED IN TEACHER OTHER   00357014
               GROUPS HAD POWER VESTED (TO DIFFERENT DEGREES) IN THE     00357015
               GROUP ITSELF,  IN ALL GROUPS, HOWEVER, THE TEACHER        00357016
               FOLLOWS HIS OWN WISHES AS FAR AS INSTRUCTION IS CONCERNED,00357017
```

```
                VERBAL AGGRESSION AND UNFAVORABLE TEACHER RATINGS WERE    00357018
                ABSENT IN THE GROUP GIVEN NO CONTROL OVER THE             00357019
                INSTRUCTIONAL PROCEDURES BUT BOTH INCREASED AS A          00357020
                FUNCTION OF THE PRE-ARRANGED POWER VESTED IN THE OTHER    00357021
                GROUPS,  GROUP DISCUSSIONS FOLLOW WHICH FOCUS OF FEELING, 00357022
*SETTING        SMALL GROUP (1-12 STUDENTS),  COLLEGE                     00357010
*MATERIALS      BLANK                                                     00357005
*LEVEL          ALL GRADES                                                00357008
*GENERAL        BLANK                                                     00357007
*HOURS          1 1/2                                                     00357006
*EVALUATION     GROUP DISCUSSIONS IDENTIFY THE FEELINGS OF A LOSS OF      00357027
                POWER FOR THE GROUPS INITIALLY GIVEN VARYING AMOUNTS OF   00357028
                CONTROL VS, THE FEELINGS OF THE GROUP THAT WAS GIVEN NO   00357029
                CONTROL FROM THE VERY BEGINNING,                          00357030
*FILE           GROUPS  SOCIAL MOTIVATION  POWER LESSNESS                 00357009
```

```
*OBJECTIVES     THE STUDENT CAN IDENTIFY AT LEAST THREE OF MASLOW≠S       00358014
                CRITERIA OF SELF-ACTUALIZATION THE EMPHASIS ON PROBLEM-   00358015
                CENTERING IS DEFINED AS AN ESSENTIAL ELEMENT              00358016
                SELF-ACTUALIZATION                                        00358017
*PREREQUISITE   MODULES 354-357                                           00358018
*EXPERIENCE     VIEW THE FILM MASLOW AND SELF-ACTUALIZATION  DISCUSS      00358011
                MASLOWS CHARACTERIZATION OF SELF-ACTUALIZATION IN TERMS OF00358012
                SELF-ACCEPTANCE, PROBLEM-CENTERING, AND HIERARCHY OF NEEDS00358013
*SETTING        LARGE GROUP,  COLLEGE                                     00358010
*MATERIALS      FILM  MASLOW AND SELF-ACTUALIZATION PARTS 1 AND 2         00358005
*LEVEL          ALL GRADES                                                00358008
*GENERAL        ALL CANDIDATES                                            00358007
*HOURS          2                                                         00358006
*EVALUATION     DESCRIBE MASLOW≠S HIERARCHY OF NEEDS,  INDICATE THE       00358019
                ESSENTIAL INGREDIENTS WHICH SUGGEST A PROBLEM-CENTERING   00358020
                ORIENTATION,                                              00358021
*FILE           SELF-ACTUALIZATION  MASLOW  MOTIVATION                    00358009
```

```
*OBJECTIVES     THE STUDENT CAN IDENTIFY AT LEAST TWO ASPECTS OF THE      00359017
                EXISTENTIAL VIEWPOINT                                     00359018
*PREREQUISITE   DISCUSSIONS ON MOTIVATION AND SELF-ACTUALIZATION          00359019
*EXPERIENCE     DISCUSS THE PRIMARY ASPECTS OF THE EXISTENTIAL VIEWPOINT- 00359012
                THE TRANSITORINESS OF HUMAN THOUGHT AND INSTITUTIONS, THE 00359013
                DENIAL OF THE SUPREMACY OF RATIONALITY, THE NEGATIVE      00359014
                EFFECTS OF SCIENCE AND TECHNOLOGY AND THE LOSS OF THE     00359015
                INDIVIDUAL IN A MASS PRODUCTION SOCIETY,                  00359016
*SETTING        LARGE GROUP,  COLLEGE                                     00359011
*MATERIALS      BLANK                                                     00359005
*LEVEL          ALL GRADES                                                00359008
*GENERAL        ALL CANDIDATES                                            00359007
*HOURS          1                                                         00359006
*EVALUATION     DESCRIBE AT LEAST TWO MAJOR VIEWPOINTS OF THE EXISTENTIAL 00359020
                POSITION                                                  00359021
*FILE           EXISTENTIALISM  MOTIVATION  ALIENATION VS                 00359009
                SELF ACTUALIZATION                                        00359010
```

```
*OBJECTIVES     THE STUDENT IDENTIFIES A THEORETICAL POSITION WHICH       00360016
                PROVIDES A NONINSTINCTUAL BASIS FOR MOTIVATIONAL          00360017
                PROCESSES WHICH DO NOT REFLECT BIOLOGICAL DRIVES          00360018
*PREREQUISITE   INTRODUCTORY MATERIAL ON MOTIVATIONAL PROCESSES           00360019
*EXPERIENCE     DISCUSS THE CONCEPT OF FUNCTIONAL AUTONOMY OF             00360011
                BEHAVIOR-IE., IN THE PROCESS OF THE ACQUISITION OF A SKILL00360012
                OR SET OF SKILLS TOWARD SOME END, THE SKILL OR SKILLS CAN 00360013
                DEVELOP THEIR OWN MOTIVATING POWER, WHICH ENDURES EVEN    00360014
                THOUGH THE ORIGINAL END IS NO LONGER MET,                 00360015
*SETTING        LARGE GROUP,  COLLEGE                                     00360010
*MATERIALS      BLANK                                                     00360005
*LEVEL          ALL GRADES                                                00360008
*GENERAL        ALL CANDIDATES                                            00360007
*HOURS          1/2                                                       00360006
*EVALUATION     DESCRIBE AT LEAST TWO ACTIVITIES IN YOUR OWN LIFE WHICH   00360020
                YOU WOULD DESCRIBE AS FUNCTIONING AUTONOMOUSLY OF THEIR   00360021
                INITIAL MOTIVATION                                        00360022
*FILE           FUNCTIAL AUTONOMY  MOTIVATION  THEORY                     00360009

*OBJECTIVES     THE STUDENT IDENTIFIES THE MOTION THAT INTERNAL OR        00361016
                EXTERNAL STIMULI QUIDE INSTRUMENTAL BEHAVIOR IN TERMS OF  00361017
                THEIR POTENTIAL REWARDING OR PUNISHING IMPLICATIONS,      00361018
*PREREQUISITE   INTRODUCTORY MATERIAL ON LEARNING AND MOTIVATION, AND     00361019
                UNDERSTANDING CONCEPT OF INSTRUMENTAL BEHAVIOR            00361020
*EXPERIENCE     DISCUSS MOWRER≠S CONTRIBUTION TO THE THEORETICAL          00361011
                UNDERSTANDING OF ANXIETY AS AN ACQUIRED DRIVE,  HE        00361012
                PROPOSES THAT ALL LEARNING, INCLUDING ANXIETY, IS SIGN    00361013
                LEARNING THROUGH CONTIGUITY,  HIS ESSENTIAL EMPHASIS IS ON00361014
                THE INCENTIVE FUNCTION OF STIMULI                         00361015
*SETTING        LARGE GROUP,  COLLEGE                                     00361010
*MATERIALS      BLANK                                                     00361005
*LEVEL          ALL GRADES                                                00361008
*GENERAL        ALL CANDIDATES                                            00361007
*HOURS          1                                                         00361006
*EVALUATION     ACCORDING TO MOWRER, DESCRIBE THE MANNER IN WHICH STIMULI 00361021
                FUNCTION IN AN INCENTIVE CAPACITY,                        00361022
*FILE           MOWRER  ANXIETY  ACQUIRED MOTIVES                         00361009

*OBJECTIVES     THE STUDENT CAN DESCRIBE TWO AREAS WHICH THE              00362019
                COMMUNICATIONS SCIENTIST MUST CONCERN HIMSELF WITH        00362020
*PREREQUISITE   NONE                                                      00362021
*EXPERIENCE     CENTRAL ASPECTS OF COMMUNICATION CENTER ABOUT THREE       00362011
                CONSIDERATIONS-TECHICAL, SEMANTIC AND INFLUENTIAL,        00362012
                DISCUSS THESE ASPECTS: TECHNICAL PROBLEMS ARE CONCERNED   00362013
                WITH THE OCCURACY OF INFORMATION TRANSFER; SEMANTIC       00362014
                CONSIDERATIONS DEAL WITH THE RECEIVER≠S INTERPRETATION OF 00362015
                THE MEANING; INFLUENTIAL ELEMENTS CONSIDER THE            00362016
                EFFECTIVENESS WITH WHICH THE MESSAGE LEADS TO THE         00362017
                DESIRED CONDUCT                                           00362018
*SETTING        LARGE GROUP,  COLLEGE                                     00362010
*MATERIALS      BLANK                                                     00362005
*LEVEL          ALL GRADES                                                00362008
*GENERAL        ALL CANDIDATES                                            00362007
*HOURS          1                                                         00362006
*EVALUATION     IDENTIFY THE TECHNICAL, SEMANTIC, AND INFLUENTIAL PROBLEMS00362022
                OF CONCERN IN THE PROCESS OF COMMUNICATION,               00362023
*FILE           COMMUNICATION  SEMANTICS  PROBLEM AREAS IN COMMUNICATION  00362009

*OBJECTIVES     THE STUDENT UNDERSTANDS THAT COMMUNICATIONS              00363020
                FUNCTION OF ENABLING TWO OR MORE INDIVIDUALS MAINTAIN     00363021
                SIMULTANEOUS ORIENTATION TOWARD ONE ANOTHER AND TOWARD    00363022
                OBJECTS OF COMMUNICATION                                  00363023
*PREREQUISITE   MODULE 37                                                 00363024
*EXPERIENCE     DISCUSS THE BASIC CONCEPT OF NEWCOMB≠S COMMUNICATION      00363011
```

```
                THEORY WHICH DESCRIBES CO-ORIENTATION AND THE A-B-X SYSTEM00363012
                PRESENTED DIAGRAMATICALLY  THE DIAGRAM PRESENTS THE       00363013
                MINIMAL COMPONENTS OF THE A-B-X SYSTEM;  1, A#S           00363014
                ORIENTATION TOWARD X= WHICH INCLUDES BOTH ALTITUDE TOWARD 00363015
                X AS AN OBJECT TO BE APPROACHED OR AVOIDED AND BELIEFS    00363016
                TOWARD A  2, A#S ORIENTATION TOWARD B, IN EXACTLY THE SAME00363017
                SENSE  3, B#S ORIENTATION TOWARD X,4, B#S ORIENTATION     00363018
                TOWARD A                                                  00363019
*SETTIN3        LARGE GROUP,  COLLEGE                                     00363010
*MATERIALS      BLANK                                                     00363005
*LEVEL          ALL GRADES                                                00363008
*GENERAL        ALL CANDIDATES                                            00363007
*HOURS          1                                                         00363006
*EVALUATION     THE STUDENT DESCRIBES THE WAY IN WHICH A#S ORIENTATION    00363025
                TOWARD B VARIES AS A FUNCTION OF BOTH OF THEIR            00363026
                ORIENTATIONS TOWARD X, AND THE MANNER IN WHICH A MAY BE   00363027
                FORCED TO ACHIEVE SYMMETRY WITH B IN RESPECT TO X         00363028
*FILE           COMMUNICATION  A-B-X SYSTEM  NEWCOMB                      00363009
```

```
*OBJECTIVES     THE STUDENT IS MADE AWARE OF HIS PATTERNS OF COMMUNICATION00364018
                AND HOW MUCH OF HIS COMMUNICATION IS USED TO AFFECT THE   00364019
                ENVIRONMENT AND HIMSELF                                   00364020
*PREREQJISITE   INTRODUCTORY MATERIAL ON COMMUNICATION PROCESSES          00364021
*EXPERIENCE     KEEP A COMMUNICATION DIARY FOR ONE DAY,  INCLUDE A RECORD 00364011
                OF WHOM YOU COMMUNICATE WITH, THE LENGTH OF TIME YOU SPEND00364012
                AT IT, AND THE PURPOSE OF THE COMMUNICATION,  AFTER THIS  00364013
                TIME ATTEMPT TO ANALYZE THE DIARY IN TERMS OF THE MOST    00364014
                FREQUENT PURPOSES IN COMMUNICATION, THE SUCCESS IN        00364015
                ACCOMPLISHING THE PURPOSES, THE DIFFERENT KINDS OF        00364016
                PURPOSES, AND THE AMOUNT OF TIME SPENT NOT COMMUNICATING  00364017
*SETTIN3        INDEPENDENT,  COLLEGE                                     00364010
*MATERIALS      BLANK                                                     00364005
*LEVEL          ALL GRADES                                                00364008
*GENERAL        ALL CANDIDATES                                            00364007
*HOURS          12-16                                                     00364006
*EVALUATION     EXAMINATION OF THE DIARY AND REPORT FOR A)THOROUGHNESS OF 00364022
                COVERAGE; B)INSIGHT INTO VARYING PATTERNS OF COMMUNICATION00364023
                C)IDENTIFICATION OF LARGE DEGREE OF COMMUNICATION USED TO 00364024
                AFFECT OTHERS                                             00364025
*FILE           COMMUNICATION  DIARY  ANALYZE COMMUNICATION               00364009
```

```
*OBJECTIVES     THE TEACHER CAN DESCRIBE AT LEAST TWO TOPIC AREAS WHICH   00365018
                CAN BE TRANSMITTED THROUGH ORAL, VISUAL OR PHYSICAL MEANS 00365019
*PREREQJISITE   INTRODUCTORY LECTURE MATERIAL ON ENCODING, DECODING AND   00365020
                COMMUNICATION CHANNELS                                    00365021
*EXPERIENCE     DISCUSS THE FAILURE OF EDUCATORS TO ANALYZE THEIR         00365011
                TEACHING FUNCTIONS IN TERMS OF A COMMUNICATION POINT OF   00365012
                VIEW,  IDENTIFY THE KINDS OF MESSAGES WHICH CAN BE        00365013
                TRANSMITTED ORALLY IN THE CLASSROOM, THOSE WHICH CAN BE   00365014
                TRANSMITTED VISUALLY THROUGH BOOKS, THOSE WHICH SHOULD BE 00365015
                TRANSMITTED NONVERBALLY THROUGH PICTURES, AND THOSE WHICH 00365016
                CAN BE TRANSMITTED PHYSICALLY THROUGH TOUCH,              00365017
*SETTIN3        LARGE GROUP,  COLLEGE                                     00365010
*MATERIALS      BLANK                                                     00365005
*LEVEL          ALL GRADES                                                00365008
*GENERAL        ALL CANDIDATES                                            00365007
*HOURS          1 1/2                                                     00365006
*EVALUATION     FOCUS ON TWO TOPIC AREAS AND DESCRIBE WHICH CHANNELS YOU  00365022
                WOULD USE TO COMMUNICATE THIS MATERIAL TO A GROUP OF      00365023
```

```
               CHILDREN THAT WAS SEVEN YEARS OLD, AND A GROUP OF TWELVE  00365024
               YEAR-OLDS.                                                00365025
*FILE          COMMUNICATION  CHANNELS  OF EDUCATION                     00365009

*OBJECTIVES    THE STUDENT CAN DESCRIBE TWO WAYS IN WHICH LEARNING AND   00366017
               COMMUNICATION MODELS ARE SIMILAR                          00366018
*PREREQUISITE  INTRODUCTORY LECTURE MATERIAL ON COMMUNICATION INCLUDING  00366019
*EXPERIENCE    DISCUSS THE WAYS IN WHICH THE LEARNING MODEL AND          00366011
               COMMUNICATION MODEL ARE ANALAGOUS.  A MESSAGE CAN BE      00366012
               VIEWED AS A STIMULUS; THE DECODING OF THE MESSAGE         00366013
               INVOLVES THE PERCEPTION OF IT AS A STIMULUS; THE ENCODING 00366014
               OF A MESSAGE INVOLVES MAKING AN OVERT RESPONSE TO THE     00366015
               STIMULUS AS IT IS PERCEIVED AND INTERPRETED               00366016
               DEFINITION OF TERMS: MESSAGE, ENCODING, AND DECODING.     00366020
*SETTING       INDEPENDENT,  COLLEGE                                     00366010
*MATERIALS     BLANK                                                     00366005
*LEVEL         ALL GRADES                                                00366008
*GENERAL       ALL CANDIDATES                                            00366007
*HOURS         1/2                                                       00366006
*EVALUATION    DESCRIBE AT LEAST TWO WAYS IN WHICH THE COMMUNICATION     00366021
               PROCESS CAN BE VIEWED AS COMPARABLE TO THE LEARNING       00366022
               PROCESS                                                   00366023
*FILE          COMMUNICATION AND LEARNING  ENCODING + DECODING           00366009

               THE STUDENT IDENTIFIES PRINCIPLES OF LEARNING WHICH INSURE00367020
               WITH GREATER CERTAINTY THAT AN INTENDED BEHAVIOR IS       00367021
               PRODUCED                                                  00367022
*EXPERIENCE    HAVE THE STUDENT SELECT AN INSTANCE IN WHICH A SOURCE     00367011
               WANTS HIS RECEIVER TO LEARN-SPECIFICALLY, TO CHANGE AN    00367012
               S-R RELATIONSHIP.  HAVE HIM SPECIFY THE PREVIOUS S-R      00367013
               RELATIONSHIP AND THE ONE WHICH IS TO BE SUBSTITUTED FOR   00367014
               IT.  THE STUDENT IS TO SUGGEST WAYS IN WHICH THE SOURCE   00367015
               COULD INCREASE THE CHANCES THAT THE RECEIVER WOULD LEARN  00367016
               IN THE INTENDED MANNER BY APPLYING PRINCIPLES OF          00367017
               LEARNING WHICH DETERMINE THE DEVELOPMENT AND STRENGTHENING00367018
               OF HABITS                                                 00367019
*PREREQUISITE  PRESENTATION OF FACTORS DETERMINING THE DEVELOPMENT AND   00367023
               STRENGTHENING OF HABITS; INTRODUCTORY MATERIAL ON         00367024
               COMMUNICATIONS                                            00367025
*SETTING       INDEPENDENT,  COLLEGE                                     00367010
*MATERIALS     BLANK                                                     00367005
*LEVEL         ALL GRADES                                                00367008
*GENERAL       ALL CANDIDATES                                            00367007
*HOURS         1 1/2                                                     00367006
*EVALUATION    EXAMINE THE REPORT IN TERMS OF IDENTIFYING THE BEHAVIOR TO00367026
               BE CHANGED AND IN TERMS OF THE EFFICIENT AND APPROPRIATE  00367027
               APPLICATION OF LEARNING PRINCIPLES                        00367028
*FILE          COMMUNICATION  LEARNING  HABIT STRENGTH                   00367009

*OBJECTIVES    THE STUDENT UNDERSTANDS ONE ASPECT OF EMPATHY THEORY IN   00368017
               COMMUNICATION WHICH PROPOSES THAT COMMUNICATORS CARRY SETS00368018
               OF IMAGES AND EXPECTATIONS REGARDING RECEIVERS            00368019
*PREREQUISITE  INTRODUCTORY MATERIAL ON INTERPERSONAL COMMUNICATIONS     00368020
*EXPERIENCE    DISCUSS INFERENCE THEORY WHICH SUGGESTS THAT MAN OBSERVES 00368011
               HIS OWN PHYSICAL BEHAVIOR, RELATES HIS BEHAVIOR           00368012
               SYMBOLICALLY TO HIS OWN INTERNAL PSYCHOLOGICAL STATES (IE,00368013
               HIS FEELINGS, THOUGHTS, AND EMOTIONS) AND CAN MAKE        00368014
               INFERENCES ABOUT THE INTERNAL STATES OF OTHERS ON THE     00368015
```

```
                BASIS OF HIS PREVIOUS INTERPRETATIONS OF HIMSELF          00368016
*SETTING        LARGE GROUP,  COLLEGE                                     00368010
*MATERIALS      BLANK                                                     00368005
*LEVEL          ALL GRADES                                                00368008
*GENERAL        ALL CANDIDATES                                            00368007
*HOURS          1/2                                                       00368006
*EVALUATION     DESCRIBE THREE INSTANCES IN WHICH YOU HAVE EMPLOYED       00368021
                INFERENCE WITH REGARD TO A RECEIVER OF YOUR COMMUNICATION,00368022
*FILE           COMMUNICATION  EMPATHY  INFERENCE THEORY                  00368009
```

```
*OBJECTIVES     THE STUDENT CAN DESCRIBE INTERACTION AS THE GOAL OF       00369016
                HUMAN COMMUNICATION; THE STUDENT COMES TO UNDERSTAND THAT 00369017
                INTERACTION REPRESENTS, IN PART, RECIPROCAL ROLE-TAKING,  00369018
*PREREQUISITE MODULES 362-368                                            00369019
*EXPERIENCE     ESTABLISH SMALL ROLE PLAYING GROUPS HAVE CLEARLY-DEFINED 00369011
                ROLES FOR EACH MEMBER OF THE GROUP,  THROUGHOUT THE GROUP,00369012
                HAVE THE MEMBERS CHANGE THE ROLES THEY PLAY, WITH SPECIFIC00369013
                EMPHASISON HAVING MEMBERS WITH OPPOSED ROLES ALTERNATE    00369014
                WITH EACH OTHER                                           00369015
*SETTING        SMALL GROUP (1-12 STUDENTS),  COLLEGE                     00369010
*MATERIALS      BLANK                                                     00369005
*LEVEL          ALL GRADES                                                00369008
*GENERAL        ALL CANDIDATES                                            00369007
*HOURS          1 1/2                                                     00369006
*EVALUATION     EXAMINE THE EFFECTIVENESS WITH WHICH THE MEMBERS CAN      00369020
                ACHIEVE THE ASSIGNED ROLE, AND SUBSEQUENTLY SWITCH TO THE 00369021
                OPPOSITE ROLE-SUBSEQUENT GROUP DISCUSSION SERVES TO       00369022
                CLARIFY THE IMPORTANCE OF RECIPROCAL ROLE-TAKING IN THE   00369023
                INTERACTION PROCESS                                       00369024
*FILE           ROLE-PLAYING  INTERACTION  COMMUNICATION                  00369009
```

```
*OBJECTIVES     THE STUDENT DESCRIBES WAYS IN WHICH SOCIAL SYSTEMS        00370014
                DETERMINE THE FREQUENCY OF MESSAGES, THE RANGE OF         00370015
                RECEIVERS, AND THE NUMBER OF PEOPLE WITH WHOM AN          00370016
                INDIVIDUAL COMMUNICATES,                                  00370017
*PREREQUISITE BASIC LECTURE MATERIAL ON COMMUNICATION PROCESSES          00370018
*EXPERIENCE     DISCUSS THE WAYS IN WHICH VARIOUS FACTORS IN SOCIAL       00370011
                SYSTEMS CAN INFLUENCE COMMUNICATION PROCESSES,  INCLUDE   00370012
                HERE GROUP ROLES, NORMS AND GOALS,                        00370013
*SETTING        LARGE GROUP,  COLLEGE                                     00370010
*MATERIALS      BLANK                                                     00370005
*LEVEL          ALL GRADES                                                00370008
*GENERAL        ALL CANDIDATES                                            00370007
*HOURS          1/2                                                       00370006
*EVALUATION     DESCRIBE A SOCIAL SYSTEM TO WHICH YOU BELONG AND INDICATE 00370019
                THE MANNER IN WHICH CHANNELS OF COMMUNICATION ARE LIMITED 00370020
                WITHIN THE SYSTEM,                                        00370021
*FILE           COMMUNICATION  GROUPS  SOCIAL SYSTEMS                     00370009
```

```
*OBJECTIVES     THE STUDENT DIFFERENTIATES THE WEAKNESSES IN THE ROLE-    00371019
                TAKING, EMPATHIC, INTERACTIVE ELEMENTS IN COMMUNICATION   00371020
*PREREQUISITE PRIOR DISCUSSION OF RECIPROCAL ROLE-TAKING, EMPATHY, AND   00371021
                INTERACTION                                               00371022
*EXPERIENCE     DISCUSS THE WEAKNESSES IN INTERACTION IN THE COMMUNCIATION00371011
                PROCESS,  INCLUDE HERE THE FACT THAT INTERACTION (IE,,    00371012
                RECIPROCAL ROLE-TAKING) REQUIRES THE EXPENDITURE OF LARGE 00371013
                AMOUNTS OF ENERGY, THAT EMPATHIC ACCURACY DECREASES WITH  00371014
                AN INCREASE IN GROUP SIZE, THAT EMPATHIC ACCURACY         00371015
                DECREASES WHEN WE ARE INSENSITIVE TO THE BEHAVIOR OF      00371016
                OTHERS, AND THAT EMPATHIC ACCURACY DECREASES WHEN WE ARE  00371017
                NOT MOTIVATED IN THE COMMUNICATION SITUATION,             00371018
*SETTING        LARGE GROUP,  COLLEGE                                     00371010
*MATERIALS      BLANK                                                     00371005
*LEVEL          ALL GRADES                                                00371008
*GENERAL        ALL CANDIDATES                                            00371007
*HOURS          1/2                                                       00371006
*EVALUATION     DESCRIBE AT LEAST THREE ELEMENTS WHICH SERVE TO WEAKEN THE00371023
                EFFECTIVENESS OF COMMUNICATION IN THE SENSE OF INTERACTION00371024
*FILE           COMMUNICATION EMPATHY INTERACTION                         00371009
```

```
*OBJECTIVES     ROLE BEHAVIORS CAN BE IDENTIFIED FROM MANY POINTS OF      00372019
                VIEWS; THE IMPOSED STRUCTURES MAY NOT BE THE ACTUAL       00372020
                STRUCTURE; GREAT ROLE DISPARITY RESULTS IN BREAKDOWN OF   00372021
                COMMUNICATION,                                            00372022
*PREREQUISITE   INTRODUCTORY LECTURES ON COMMUNICATION                    00372023
*EXPERIENCE     DISCUSS PREDICTION OF ROLE BEHAVIORS WITHIN A SOCIAL      00372011
                SYSTEM=ROLES CAN BE ANALYZED BY EXAMINING; 1) THE FORMAL, 00372012
                EXPLICIT STATEMENT OF THE BEHAVIORS TO BE PERFORMED;      00372013
                2) THE BEHAVIORS THAT ACTUALLY ARE PERFORMED BY A PERSON  00372014
                IN A GIVEN ROLE; 3) THE IMAGES THAT PEOPLE HAVE ABOUT THE 00372015
                BEHAVIORS PERFORMED BY PERSONS IN A GIVEN ROLE,  THESE ARE00372016
                IDEALLY EQUIVALENT=IF THEY DIFFER RADICALLY COMMUNICATION 00372017
                BREAKDOWN OCCURS,                                        00372018
*SETTING        LARGE GROUP,  COLLEGE                                     00372010
*MATERIALS      BLANK                                                     00372005
*LEVEL          ALL GRADES                                                00372008
*GENERAL        ALL CANDIDATES                                            00372007
*HOURS          1/2                                                       00372006
*EVALUATION     DESCRIBE TWO WAYS OF EXAMINING ROLE BEHAVIOR IN GROUPS,   00372024
                WHAT AFFECTS DOES A GREAT DISPARITY IN ROLE STRUCTURE HAVE00372025
                ON COMMUNICATION,                                         00372026
*FILE           COMMUNICATION  ROLES  COMMUNICATION BREAKDOWN             00372009
```

```
*OBJECTIVES     THE STUDENT IDENTIFIES THE NECESSITY FOR MAINTAINING ROLE 00373016
                BEHAVIORS AND ROLE POSITIONS IF EFFECTIVE COMMUNICATION IS00373017
                TO PREVAIL                                                00373018
*PREREQUISITE   MODULES 37-47                                             00373019
*EXPERIENCE     THE STUDENT IS TO DESCRIBE BREAKDOWNS IN COMMUNICATIONS   00373011
                WHICH HAVE OCCURRED IN SOCIAL SYSTEMS OF WHICH HE HAS BEEN00373012
                A PART,  ANALYSIS OF THE BREAKDOWN SHOULD BE MADE         00373013
                PARTICULARLY WITH REFERENCE TO THE ABILITY TO PREDICT ROLE00373014
                BEHAVIORS AND ROLE POSITIONS IN THE SYSTEM                00373015
*SETTING        INDEPENDENT,  COLLEGE                                     00373010
*MATERIALS      BLANK                                                     00373005
*LEVEL          ALL GRADES                                                00373008
*GENERAL        ALL CANDIDATES                                            00373007
*HOURS          1 1/2                                                     00373006
*EVALUATION     THE STUDENT*S IDENTIFICATION OF UNPREDICTABLE ROLE        00373020
                POSITIONS AND EXPECTATIONS AS A MAJOR FACTOR IN           00373021
                COMMUNICATION BREAKDOWN                                   00373022
*FILE           COMMUNICATION  BREAKDOWN  ROLE BEHAVIOR                   00373009
```

```
*OBJECTIVES    TO INTRODUCE CLASSICAL CONDITIONING TO THE TEACHERS.         01584 15
*PREREQUISITE NONE                                                           01584 16
*EXPERIENCE    SHOW THE FILM: CONDITIONED REFLEXES.  THIS FILM EXPLAINS      01584 11
               PANLOR≤S EXPERIMENTS AND THE THEORY OF CONDITIONED            01584 12
               REFLEXES.  FILM IS AVAILABLE FROM RANDON FILMS, INC.          01584 13
               200 W. 57TH STREET, NEW YORK 19, N.Y.                         01584 14
*SETTING       LARGE GROUP  COLLEGE                                          01584 10
*MATERIALS     FILM + PROJECTOR.                                             01584  5
*LEVEL         ALL GRADES                                                    01584  8
*GENERAL       ALL CANDIDATES                                                01584  7
*HOURS         1/3                                                           01584  6
*EVALUATION    WHAT ARE THE THREE ESSENTIAL VALUES NECECESSARY IN            01584 17
               CLASSICAL CONDITIONING^  ANSWER:  UNCONDITIONAL STIMULUS,     01584 18
               UNCONDITIONED RESPONSE, CONDITIONED RESPONSE.                 01584 19
*FILE          CONDITIONING  PANLOR  CLASSICAL CONDITIONING                  01584  9
```

```
*OBJECTIVES    FOR THE TEACHERS TO BE ABLE TO RECALL THE ESSENTIAL           01585 17
               CHARACTERISTIC OF CLASSICAL CONDITIONING.                     01585 18
*PREREQUISITE NONE                                                           01585 19
*EXPERIENCE    EACH TEACHER IS TO SELECT THREE ARTICLES REVIEWED IN THE      01585 11
               PSYCHOLOGICAL INDEX UNDER THE TOPIC OF                        01585 12
               [CONDITIONING/CLASSICAL.[  FROM THESE ARTICLES, EACH          01585 13
               TEACHER IS TO DERIVE THE ESSENTIAL CHARACTERISTICS            01585 14
               ASSOCIATED WITH CLASSICAL CONDITIONING.  A COMPOSITE LIST     01585 15
               OF THE CHARACTERISTICS CAN BE MADE FOR CLASS DISTRIBUTION.01585 16
*SETTING       INDEPENDENT  COLLEGE                                          01585 10
*MATERIALS     NONE                                                          01585  5
*LEVEL         ALL GRADES                                                    01585  8
*GENERAL       ALL CANDIDATES                                                01585  7
*HOURS         1/4                                                           01585  6
*EVALUATION    LIST THE ESSENTIAL CHARACTERISTICS OF CLASSICAL               01585 20
               CONDITIONING.                                                 01585 21
*FILE          CLASSICAL CONDITIONING  PANLOR  RESPONDENT CONDITIONING       01585  9
```

```
*OBJECTIVES    TO DEMONSTRATE THE ESSENTIAL CHARACTERISTICS OF CLASSICAL 01586 15
               CONDITIONING.                                                 01586 16
*PREREQUISITE MODULE 1585                                                    01586 17
*EXPERIENCE    WORKING IN A SMALL GROUP, THE TEACHERS ARE TO ROLE-PLAY       01586 11
               OR IN SOME WAY, DEMONSTRATE CLASSICAL CONDITIONING.  THE      01586 12
               ESSENTIAL CHARACTERISTICS OF CLASSICAL CONDITIONING FOUND 01586 13
               IN MODULE 1585 ARE TO BE ILLUSTRATED BEFORE THE CLASS.        01586 14
*SETTING       SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                          01586 10
*MATERIALS     NONE                                                          01586  5
*LEVEL         ALL GRADES                                                    01586  8
*GENERAL       ALL CANDIDATES                                                01586  7
*HOURS         1/4                                                           01586  6
```

```
*EVALUATION    EACH GROUP WILL BE EVALUATED BY OTHER CLASS MEMBERS AS TO 01586 18
               HOW WELL THE ESSENTIAL CHARACTERISTICS OF CLASSICAL       01586 19
               CONDITIONING WERE DEMONSTRATED.                           01586 20
*FILE          RESPONDENT CONDITIONING  CLASSICAL CONDITIONING  PANDOVIAN01586  9
               CONDITIONING                                              01586
```

```
*OBJECTIVES    TO DEMONSTRATE THE EFFECT OF EXTINCTION IN CLASSICAL      01587 17
               CONDITIONING.                                             01587 18
*PREREQUISITE  MODULE 1585 + 86                                          01587 19
*EXPERIENCE    AFTER THE MODULE 1586 IS DEMONSTRATED, ANOTHER GROUP OF   01587 11
               STUDENTS ARE TO USE THE PROCESS OF EXTINCTION TO REDUCE   01587 12
               THE CONDITIONED RESPONSE TO ITS PRECONDITIONING STATE.    01587 13
               EITHER COUNTER-CONDITIONING OR DESENSITIZATION MAY BE USED01587 14
               IN THE PROCESS OF EXTINCTION.  DISCUSSION OF THE          01587 15
               DEMONSTRATION SHOULD FOLLOW.                              01587 16
*SETTING       SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                      01587 10
*MATERIALS     NONE                                                      01587  5
*LEVEL         ALL GRADES                                                01587  8
*GENERAL       ALL CANDIDATES                                            01587  7
*HOURS         1/4                                                       01587  6
*EVALUATION    THE GROUP WILL BE EVALUATED BY OTHER CLASS MEMBERS AS TO  01587 20
               THE EFFECTIVENESS OF THE DEMONSTRATION OF EXTINCTION      01587 21
               ON THE CONDITIONED RESPONSE.                              01587 22
*FILE          CONDITIONING  RESPONDENT CONDITIONING  EXTINCTION         01587  9
```

```
*OBJECTIVES    TO ILLUSTRATE THE ROLE OF SPONTANEOUS RECOVERY IN         01588 16
               CLASSICAL CONDITIONING.                                   01588 17
*PREREQUISITE  MODULES 1585, 86 + 87                                     01588 18
*EXPERIENCE    AFTER THE PROCESS OF EXTINCTION IS CONCLUDED IN EXPERIENCE01588 11
               MODULE 1587, ANOTHER SMALL GROUP OF TEACHERS ARE TO       01588 12
               ILLUSTRATE THE VARIABLE OF SPONTANEOUS RECOVERY IN        01588 13
               CLASSICAL CONDITIONING.  DISCUSSION OF THIS VARIABLE      01588 14
               SHOULD FOLLOW THE DEMONSTRATION.                          01588 15
*SETTING       SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                      01588 10
*MATERIALS     BLANK                                                     01588  5
*LEVEL         ALL GRADES                                                01588  8
*GENERAL       ALL CANDIDATES                                            01588  7
*HOURS         1/4                                                       01588  6
*EVALUATION    ESSAY QUESTION:  DEFINE WHAT SPONTANEOUS RECOVERY IS AND  01588 19
               GIVE A CLASSROOM ILLUSTRATION OF ITS USE.                 01588 20
*FILE          CLASSICAL CONDITIONING  RESPONDENT CONDITIONING  PANLOVIAN01588  9
               CONDITIONING                                              01588
```

```
*OBJECTIVES    TO ILLUSTRATE AND DEMONSTRATE RESPONSE GENERALIZATION IN  01589 15
               CLASSICAL CONDITIONING.                                   01589 16
*PREREQUISITE  EXPERIENCE MODULE 1585 + 86                               01589 17
*EXPERIENCE    USING EXPERIENCE MODULE 1586 AS A STARTING POINT, ANOTHER 01589 11
               GROUP OF STUDENTS ARE TO DEMONSTRATE THE PROCESS OF       01589 12
               RESPONSE GENERALIZATION.  DISCUSSION OF THIS PROCESS IS TO01589 13
               FOLLOW THE DEMONSTRATION.                                 01589 14
*SETTING       SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                      01589 10
*MATERIALS     NONE                                                      01589  5
*LEVEL         ALL GRADES                                                01589  8
*GENERAL       ALL CANDIDATES                                            01589  7
*HOURS         1/4                                                       01589  6
*EVALUATION    TEST ITEM:  GIVE A CLASSROOM ILLUSTRATION OF RESPONSE     01589 18
               GENERALIZATION.                                           01589 19
*FILE          CLASSICAL CONDITIONING  RESPONDENT CONDITIONING  PAVLOVIAN01589  9
```

```
              CONDITIONING                                                    01589

*PREREQUISITE EXPERIENCE MODULE 1585 + 86                                     01590 14
*EXPERIENCE   FOLLOWING EXPERIENCE MODULE 1585, A GROUP OF TEACHERS ARE       01590 11
              TO ILLUSTRATE STIMULUS GENERALIZATION IN CLASSICAL              01590 12
              CONDITIONING.                                                   01590 13
*SETTING      SMALL GROUP ≥1-12 STUDENTS,  COLLEGE                            01590 10
*MATERIALS    NONE                                                            01590  5
*LEVEL        ALL GRADES                                                      01590  8
*GENERAL      ALL CANDIDATES                                                  01590  7
*HOURS        1/4                                                             01590  6
*EVALUATION   EACH TEACHER IS TO GIVE A CLASSROOM EXAMPLE OF STIMULUS        01590 15
              GENERALIZATION.                                                 01590 16
*FILE         CLASSICAL CONDITIONING  PANLOVIAN CONDITIONING  RESPONDENT01590  9
              CONDITIONING                                                    01590
--------------------------------------------------------------------------------------

*OBJECTIVES   TO INTRODUCE TO THE STUDENTS, BACKGROUND READINGS ON THE        01591 15
              FORMAL ASPECTS OF LEARNING.                                     01591 16
*PREREQUISITE NONE.                                                           01591 17
*EXPERIENCE   EACH TEACHER IS TO READ AND SUMMARIZE CHAPTER 3 IN              01591 11
              R. M. W. TRANERS, ESSENTIALS OF LEARNING.  SECOND EDITION.01591 12
              MACMILLIAN COMPANY:  NEW YORK:  1967.  CHAPTER 3:               01591 13
              [REINFORCEMENT AND LEARNING.[                                   01591 14
*SETTING      INDEPENDENT  COLLEGE                                            01591 10
*MATERIALS    BLANK                                                           01591  5
*LEVEL        ALL GRADES                                                      01591  8
*GENERAL      ALL CANDIDATES                                                  01591  7
*HOURS        1                                                               01591  6
*EVALUATION   EACH TEACHER IS TO TURN IN TO THE INSTRUCTOR, A WRITTEN         01591 18
              SUMMARY OF THIS CHAPTER.                                        01591 19
*FILE         LEARNING  CONDITIONING  REINFORCEMENT                           01591  9
--------------------------------------------------------------------------------------

*OBJECTIVES   TO DEMONSTRATE THE INFLUENCES OF DIFFERENT REINFORCEMENT        01592 18
              SCHEDULES.                                                      01592 19
*PREREQUISITE NONE.                                                           01592 20
*EXPERIENCE   TEACHERS SHOULD SEE THE FILM:  CONTROLLING BEHAVIOR             01592 11
              THROUGH REINFORCEMENT.  THIS FILM DEMONSTRATES THAT             01592 12
              DIFFERENT REINFORCEMENT SCHEDULES INFLUENCES HOW FAR AN         01592 13
              ORGANISM WORKS AT ANY GIVEN TIME AND HOW IT DISTRIBUTES         01592 14
              THAT WORK WITHIN A GIVEN TIME PERIOD.  AVAILABLE FROM           01592 15
              MCGRAW-HILL BOOK COMPANY  TEXT-FILM DEPT.  330 W 42ND           01592 16
              STREET, NEW YORK 36, N.Y.                                       01592 17
*SETTING      LARGE GROUP  COLLEGE                                            01592 10
*MATERIALS    FILM, PROJECTOR.                                                01592  5
*LEVEL        ALL GRADES                                                      01592  8
*GENERAL      ALL CANDIDATES                                                  01592  7
*HOURS        4/15                                                            01592  6
*EVALUATION   SPECIFICALLY, IDENTIFY A CLASSROOM SITUATION WHEREIN            01592 21
              DIFFERENT SCHEDULES OF REINFORCEMENT MIGHT BE EXPECTED TO 01592 22
              OPERATE.                                                        01592 23
*FILE         REINFORCEMENT  LEARNING  SCHEDULES OF REINFORCEMENT             01592  9
--------------------------------------------------------------------------------------

*OBJECTIVES   TO DEMONSTRATE THE ESSENTIAL CHARACTERISTICS OF OPERANT         01593 14
              BEHAVIOR.                                                       01593 15
*PREREQUISITE NONE                                                            01593 16
*EXPERIENCE   TEACHERS ARE TO BE SHOWN THE FILM:  LEARNING AND BEHAVIOR.01593 11
              SKINNER≤S LEARNING THEORY IS DEMONSTRATED IN EXPERIMENTS  01593 12
```

```
               WITH CHILDREN, ADULTS, AND PIGIONS IN THIS FILM.          01593 13
*SETTING       LARGE GROUP  COLLEGE                                      01593 10
*MATERIALS     FILM, PROJECTOR.                                          01593  5
*LEVEL         ALL GRADES                                                01593  8
*GENERAL       ALL CANDIDATES                                            01593  7
*HOURS         13/30                                                     01593  6
*EVALUATION    ESSAY:  BRIEFLY SUMMARIZE WHAT SKINNER ILLUSTRATED IN HIS 01593 17
               FILM, LEARNING AND BEHAVIOR:  ABOUT OPERANT LEARNING IN   01593 18
               ADULTS.                                                   01593 19
*FILE          OPERANT LEARNING  CONDITIONING  REINFORCEMENT             01593  9
```

```
*OBJECTIVES    FOR TEACHERS TO BE ABLE TO COMPARE AND CONTRAST           01594 15
               CLASSICAL AND OPERANT CONDITIONING.                       01594 16
*PREREQUISITE  NONE                                                      01594 17
*EXPERIENCE    TEACHERS ARE TO READ AND OUTLINE+  GRANT, DAVID A.        01594 11
               [CLASSICAL AND OPERANT CONDITIONING[  CHAPTER 1 IN        01594 12
               CATAGORIES OF HUMAN LEARNING.  EDITED BY ARTHUR W. MELTON.01594 13
               ACADEMIC PRESS:  NEW YORK:  1964.                         01594 14
*SETTING       INDEPENDENT  COLLEGE                                      01594 10
*MATERIALS     NONE                                                      01594  5
*LEVEL         ALL GRADES                                                01594  8
*GENERAL       ALL CANDIDATES                                            01594  7
*HOURS         1 1/2                                                     01594  6
*EVALUATION    EACH TEACHER IS TO TURN IN THE OUTLINE OF THIS CHAPTER TO 01594 18
               BE USED FOR EVALUATION.                                   01594 19
*FILE          LEARNING  OPERANT CONDITIONING  RESPONDENT CONDITIONING   01594  9
```

```
*OBJECTIVES    TO EXAMINE THE EFFECTS OF PUNISHMENT ON LEARNING.         01595 16
*PREREQUISITE  NONE                                                      01595 17
*EXPERIENCE    VIDEO-TAPE A CLASSROOM FOR AN EXTENDED PERIOD OF TIME.    01595 11
               EDIT THOSE SECTIONS WHICH ILLUSTRATE PUNISHMENT TAKING    01595 12
               PLACE.  MAKE A COMPOSITE TAPE SHOWING THE EFFECTS OF      01595 13
               PUNISHMENT UPON THE LEARNER.  THE TEACHERS ARE TO VIEW THE01595 14
               VIDEO-TAPE AND RECORD THE BEHAVIORS WHICH TAKE PLACE.     01595 15
*SETTING       LARGE  COLLEGE                                            01595 10
*MATERIALS     VIDEO-TAPE, RECORDER.                                     01595  5
*LEVEL         ALL GRADES                                                01595  8
*GENERAL       ALL CANDIDATES                                            01595  7
*HOURS         1                                                         01595  6
*EVALUATION    SHOW A NEW VIDEO-TAPE OF BEHAVIOR WHICH IS GOING TO BE    01595 18
               PUNISHED.  ASK THE TEACHERS TO HYPOTHESIZE AS TO WHAT WILL01595 19
               PROBABLY HAPPEN TO THE LEARNING BEHAVIOR OF THE STUDENT AS01595 20
               A RESULT OF THIS PUNISHMENT.                              01595 21
*FILE          PUNISHMENT  REINFORCEMENT  CONDITIONING                   01595  9
```

```
*OBJECTIVES    TO ILLUSTRATE THE EFFECTS OF REINFORCEMENT ON MOTIVATION  01596 18
               AND LEARNING.                                             01596 19
*PREREQUISITE  NONE                                                      01596 20
*EXPERIENCE    TEACHERS ARE TO PLAY SLOT MACHINES IN WHICH DIFFERENT     01596 11
               SCHEDULES OF REINFORCEMENT ARE SET UP:  1↑ CONTINUOUS     01596 12
               REINFORCEMENT  2↑ INTERMITTENT OR PARTIAL REINFORCEMENT   01596  3
               2A↑ FIXED-INTERVAL  2B↑ VARIABLE INTERVAL  2C↑ FIXED RATIO01596 14
               2D↑ VARIABLE RATIO.  AFTER PLAYING EACH SLOT MACHINE, THE 01596 15
               STUDENTS ARE TO RECORD WHICH ONE KEPT THIR INTEREST THE   01596 16
               MOST AND WHY.  DISCUSSION SHOULD FOLLOW.                  01596 17
*SETTING       INDEPENDENT  COLLEGE                                      01596 10
*MATERIALS     BLANK                                                     01596  5
*LEVEL         ALL GRADES                                                01596  8
```

```
*GENERAL       ALL CANDIDATES                                           01596  7
*HOURS         1                                                        01596  6
*EVALUATION    EACH TEACHER IS TO GIVE A CLASSROOM EXAMPLE OF EACH      01596 21
               SCHEDULE OF REINFORCEMENT.                               01596 22
*FILE          LEARNING  REINFORCEMENT SCHEDULE  CONDITIONING           01596  9
```

```
*OBJECTIVES    TO ACQUAINT THE TEACHERS WITH THE RELEVANCE OF OPERANT   01597 16
               CONDITIONING TO CLASSROOM TEACHERS.                      01597 17
*PREREQUISITE  STUDENTS SHOULD PROBABLY READ SKINNERSS WALDON II.       01597 18
*EXPERIENCE    VIA CLOSED CIRCUIT T-V, ASK B. F. SKINNER OF HARVARD     01597 11
               UNIVERSITY TO SPEAK ON THE TOPIC:  [THE RELEVANCE OF     01597 12
               OPERANT CONDITIONING TO CLASSROOM TEACHERS.[  HAVE       01597 13
               TELEPHONE HOOKUPS SO QUESTIONS FROM THE TEACHERS CAN BE  01597 14
               ASKED.                                                   01597 15
*SETTING       LARGE GROUP  COLLEGE                                     01597 10
*MATERIALS     T.V. HOOKUP WITH HARVARD UNIVERSITY.                     01597  5
*LEVEL         ALL GRADES                                               01597  8
*GENERAL       ALL CANDIDATES                                           01597  7
*HOURS         1                                                        01597  6
*EVALUATION    ESSAY QUESTION.  LIST SEVERAL WAYS IN WHICH OPERANT      01597 19
               CONDITIONING IS USED IN THE CLASSROOM.                   01597 20
*FILE          OPERANT CONDITIONING  REINFORCEMENT  LEARNING            01597  9
```

```
*OBJECTIVES    FOR TEACHERS TO BE ABLE TO RECALL THE ESSENTIAL          01598 15
               DESCRIPTION AND NATURE OF CONCEPTS.                      01598 16
*PREREQUISITE  NONE                                                     01598 17
*EXPERIENCE    EACH TEACHER IS TO READ AND SUMMARIZE:  KENDLER, HOWARD  01598 11
               H., [THE CONCEPT OF THE CONCEPT[, CATEGORIES OF HUMAN    01598 12
               LEARNING EDITED BY ARTHUR W. MELTON.  ACADEMIC PRESS:    01598 13
               NEW YORK:  1964.  PAGE 212 - 237.                        01598 14
*SETTING       INDEPENDENT  COLLEGE                                     01598 10
*MATERIALS     NONE                                                     01598  5
*LEVEL         ALL GRADES                                               01598  8
*GENERAL       ALL CANDIDATES                                           01598  7
*HOURS         1                                                        01598  6
*EVALUATION    WHAT ARE THE THREE CHARACTERISTICS OF CONCEPTS AS        01598 18
               DESCRIBED IN THIS ARTICLE BY KENDLER^                    01598 19
*FILE          CONCEPTS                                                 01598  9
```

```
*OBJECTIVES    TO BE ABLE TO COMPARE AND CONTRAST CONCEPTS AND          01599 17
               GENERALIZATIONS.                                         01599 18
*PREREQUISITE  NONE                                                     01599 19
*EXPERIENCE    EACH TEACHER SHOULD READ AND BE ABLE TO COMPARE AND      01599 11
               CONTRAST+ CONCEPTS AND GENERALIZATIONS BY READING:  PAGES 01599 12
               104-127:  IN [HOW CHILDREN LEARN INFORMATION, CONCEPTS,  01599 13
               AND GENERALIZATION[ BY WILLIAM A. BROWNELL AND GORDON    01599 14
               HENDRICKSON.  LEARNING AND INSTRUCTION.  49TH YEARBOOK   01599 15
               NSSE.  CHICAGO, 1950.                                    01599 16
*SETTING       INDEPENDENT  COLLEGE                                     01599 10
*MATERIALS     NONE                                                     01599  5
*LEVEL         ALL GRADES                                               01599  8
*GENERAL       ALL CANDIDATES                                           01599  7
*HOURS         1                                                        01599  6
*EVALUATION    ESSAY:  COMPARE AND CONTRAST HOW STUDENTS LEARN CONCEPTS 01599 20
               AND HOW THEY LEARN GENERALIZATIONS.                      01599 21
*FILE          CONCEPTS  GENERALIZATIONS  LEARNING                      01599  9
```

```
*OBJECTIVES     TO BE ABLE TO IDENTIFY VARIABLES WHICH INFLUENCE CONCEPT   01600 16
                LEARNING.                                                  01600 17
*PREREQUISITE   NONE                                                       01600 18
*EXPERIENCE     SHOW A VIDEO-TAPE WHERE A PARTICULAR CONCEPT IS BEING      01600 11
                TAUGHT TO A GROUP OF CHILDREN.  EACH TEACHER IS TO VIEW    01600 12
                THE TAPE AND IDENTIFY SIGNIFICANT FACTORS WHICH INFLUENCE  01600 13
                THE CONCEPT LEARNING.  ALL FACTORS SHOULD BE NOTED FOR     01600 14
                FURTHER DISCUSSION IN A LARGER GROUP.                      01600 15
*SETTING        BLANK  COLLEGE                                             01600 10
*MATERIALS      VIDEO-TAPE.                                                01600  5
*LEVEL          ALL GRADES                                                 01600  8
*GENERAL        ALL CANDIDATES                                             01600  7
*HOURS          1                                                          01600  6
*EVALUATION     LIST THE SIGNIFICANT FACTORS WHICH INFLUENCE CONCEPT       01600 19
                LEARNING.                                                  01600 20
*FILE           CONCEPTS  LEARNING                                         01600  9
```

```
*OBJECTIVES TO BE ABLE TO SPECIFY THE IMPLICATIONS FOR TEACHERS THAT       01601 15
                RESEARCH SAYS ABOUT CONCEPT LEARNING.                      01601 16
*PREREQUISITE   MODULES 1598 - 1600                                        01601 17
*EXPERIENCE     IN SAMLL GROUPS, THE TEACHERS ARE TO HAVE A ROUND TABLE    01601 11
                DISCUSSION ON THE TOPIC OF THE RELEVANT RESEARCH ABOUT     01601 12
                CONCEPT LEARNING AND ITS IMPLICATION FOR TEACHERS.  A      01601 13
                COMPOSITE LIST SHOULD BE MADE FOR DISTRIBUTION.            01601 14
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                       01601 10
*MATERIALS      NONE                                                       01601  5
*LEVEL          ALL GRADES                                                 01601  8
*GENERAL        ALL CANDIDATES                                             01601  7
*HOURS          1                                                          01601  6
*EVALUATION     VIDEO TAPE EACH TEACHER AS HE ATTEMPTS TO TEACH A          01601 18
                PARTICULAR CONCEPT TO A GROUP OF CHILDREN, OBSERVE IF SHE  01601 19
                USES THE SIGNIFICANT VARIABLES WHICH INCREASE THE          01601 20
                PROBABILITY OF SUCCESSFUL TEACHING OF CONCEPTS.            01601 21
*FILE           CONCEPTS  LEARNING  MEMORY                                 01601  9
```

```
*OBJECTIVES     TO BE ABLE TO RECALL THE BASIC CHARACTERISTICS OF PROBLEM  01602 17
                SOLVING.                                                   01602 18
*PREREQUISITE   NONE                                                       01602 19
*EXPERIENCE     EACH TEACHER IS TO BE PRESENTED WITH A SITUATION WHICH     01602 11
                WILL REQUIRE THEM TO SOLVE A PARTICULAR PROBLEM.  EACH     01602 12
                TEACHER IS TO FOCUS ON HIS OWN BEHAVIOR AS HE ATTEMPTS     01602 13
                TO SOLVE THE PROBLEM.  AFTER ABOUT 15 MINUTES, IN SMALL    01602 14
                GROUPS DISCUSS WHAT WERE THE CHARACTERISTICS OF PROBLEM    01602 15
                SOLVING BEHAVIOR.                                          01602 16
*SETTING        SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                       01602 10
*MATERIALS      BLANK                                                      01602  5
*LEVEL          ALL GRADES                                                 01602  8
*GENERAL        ALL CANDIDATES                                             01602  7
*HOURS          1/2                                                        01602  6
*EVALUATION     SHOW A VIDEO-TAPE OF A RAT ATTEMPTING TO RUN A MAZE.       01602 20
                EACH TEACHER IS TO IDENTIFY THE GENERAL CHARACTERISTICS    01602 21
                OF THIS PROBLEM FOR THE ANIMAL.                            01602 22
*FILE           PROBLEM SOLVING  LEARNING                                  01602  9
```

```
*OBJECTIVES     TO BE ABLE TO IDENTIFY MODELS OF PROBLEM SOLVING BEHAVIOR.01603 17
*PREREQUISITE   MODULE 1602                                                01603 18
*EXPERIENCE     THE INSTRUCTOR PRESENTS THE BEHAVIORAL VIEW, GAGNE≤S       01603 11
                VIEW AND THE COGNITIVE VIEW OF PROBLEM SOLVING TO THE      01603 12
```

```
               TEACHERS.  EACH TEACHER IS TO SPECIFY HOW EACH MODEL          01603 13
               WOULD BE APPROPRIATE FOR THE PROBLEM SOLVING BEHAVIOR         01603 14
               SPECIFIED IN MODULE = 19.  SMALL GROUP DISCUSSION WOULD       01603 15
               BE USED HERE.                                                 01603 16
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                          01603 10
*MATERIALS     NONE                                                          01603  5
*LEVEL         ALL GRADES                                                    01603  8
*GENERAL       ALL CANDIDATES                                                01603  7
*HOURS         BLANK                                                         01603  6
*EVALUATION    SPECIFICALLY HOW DOES GAGNE≤S VIEW OF PROBLEM SOLVING         01603 19
               BEHAVIOR DIFFERS FROM THE COGNITIVE VIEW OF PROBLEM           01603 20
               SOLVING BEHAVIOR.                                             01603 21
*FILE          PROBLEM SOLVING  LEARNING                                     01603  9
```

```
*OBJECTIVES    TO BE ABLE TO IDENTIFY CHARACTERISTICS OF THE LEARNER         01604 16
               WHICH INFLUENCE PROBLEM SOLVING BEHAVIOR.                     01604 17
*PREREQUISITE  NONE                                                          01604 18
*EXPERIENCE    TEACHERS ARE TO VIEW A VIDEO-TAPE OF STUDENTS SOLVING         01604 11
               PROBLEMS IN THE CLASSROOM.  THE TAPE SHOULD ILLUSTRATE        01604 12
               THE PERSONAL VARIABLES WHICH INFLUENCE PROBLEM SOLVING        01604 13
               BEHAVIOR.  THE TEACHERS WILL NOTE WHAT THESE VARIABLES        01604 14
               ARE FOR LATER DISCUSSION.                                     01604 15
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                          01604 10
*MATERIALS     VIDEO-TAPE                                                    01604  5
*LEVEL         ALL GRADES                                                    01604  8
*GENERAL       ALL CANDIDATES                                                01604  7
*HOURS         1                                                             01604  6
*EVALUATION    LIST FOUR SIGNIFICANT PERSONAL CHARACTERISTICS WHICH          01604 19
               INFLUENCE PROBLEM SOLVING BEHAVIOR.                           01604 20
*FILE          PROBLEM SOLVING  VIDEO-TAPE                                   01604  9
```

```
*OBJECTIVES    TO ILLUSTRATE THE VARIABLE [SET[ ON PROBLEM SOLVING           01605 22
               BEHAVIOR.                                                     01605 23
*PREREQUISITE  NONE                                                          01605 24
*EXPERIENCE    HAVE A SMALL GROUP OF TEACHERS FOR A CLASSROOM                01605 11
               DEMONSTRATION.  TELL THE GROUP THAT THE PROBLEM TO BE         01605 12
               SOLVED IS THAT THEY MUST MEMORIZE THE NAMES ON A SET OF       01605 13
               10 CARDS.  THE 10 CARDS ARE TO BE NUMBERED FROM 1 - 10        01605 14
               WITH A NAME OF DIFFERENT PERSON ON EACH.  ALSO HAVE A         01605 15
               DIFFERENT COLOR ON EACH CARD.  WHEN THE TEACHERS ATTEMPT      01605 16
               TO RECALL THE [NAMES[ THEY WILL RECALL THE NAMES OF           01605 17
               PERSONS, NOT THE NAMES OF THE COLORS WHICH IS THE OBJECT      01605 18
               OF THE PROBLEM SOLVING SITUATION.  THEY WILL GET IN A         01605 19
               [SET[ OF TRYING TO RECALL NAMES OF PERSONS-NOT COLORS.        01605 20
               DISCUSSION SHOULD FOLLOW CONCERNING SETS AND PERCEPTION.      01605 21
*SETTING       BLANK  COLLEGE                                                01605 10
*MATERIALS     CARDS WITH NUMBERS, NAMES AND COLORS.                         01605  5
*LEVEL         ALL GRADES                                                    01605  8
*GENERAL       ALL CANDIDATES                                                01605  7
*HOURS         1/2                                                           01605  6
*EVALUATION    ESSAY:  WHAT IS A SET AND HOW DOES IT INFLUENCE PROBLEM       01605 25
               SOLVING BEHAVIOR.                                             01605 26
*FILE          PROBLEM SOLVING  SET                                          01605  9
```

```
*OBJECTIVES    TO BE ABLE TO LIST THE IMPLICATIONS FOR TEACHERS              01606 18
               CONCERNING THE VARIABLES OF PROBLEM SOLVING BEHAVIOR.         01606 19
*PREREQUISITE  EXPERIENCE MODULES 1602 - 1605                                01606 20
*EXPERIENCE    A PANEL OF 3-5 TEACHERS ARE TO DISCUSS THE IMPLICATIONS       01606 11
```

```
                WHICH PROBLEM SOLVING BEHAVIOR HAS FOR TEACHERS.  THE 3-5 01606 12
                TEACHERS WILL BE REQUIRED TO REVIEW THE LITERATURE AND    01606 13
                PRESENT A REPORT TO THE TOTAL GROUP.  ONE MEMBER OF THIS  01606 14
                GROUP SHOULD BE THE INSTRUCTOR OF THE CLASS SO HE CAN     01606 15
                OFFER HIS GUIDANCE IN THIS DISCUSSION.  THE 3-5 MEMBERS OF01606 16
                THE PANEL ARE TO BE CONSIDERED THE [EXPERTS[ IN THE CLASS.01606 17
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                      01606 10
*MATERIALS      NONE                                                      01606  5
*LEVEL          ALL GRADES                                                01606  5
*GENERAL        ALL CANDIDATES                                            01606  7
*HOURS          1                                                         01606  6
*EVALUATION     PRESENT A PROBLEM TO THE CLASS AND HAVE THEM SPECIFY      01606 21
                EXACTLY WHAT VARIABLES THEY WOULD WANT TO BE COGNIZANT OF 01606 22
                WHEN THEY ATTEMPT TO TEACH THE PROBLEM TO THEIR CLASSES.  01606 23
*FILE           PROBLEM SOLVING  SMALL GROUPS                             01606  9

*OBJECTIVES     TO BE ABLE TO COMPARE AND CONTRAST THE [SIMPLE TO COMPLEX[01607 17
                AND COMPLEX TO SIMPLE[ TEACHING STRATEGIES FOR PROBLEM    01607 18
                SOLVING BEHAVIOR.                                         01607 19
*PREREQUISITE NONE                                                        01607 20
*EXPERIENCE     TEACHERS IN THE CLASS ARE TO DEBATE THE MERITS OF THE TWO 01607 11
                METHODS OF PROBLEM SOLVING BEHAVIOR:  [SIMPLE TO COMPLEX[ 01607 12
                AND [COMPLEX TO SIMPLE[.  BASIS FOR THE DEBATE WILL BE    01607 13
                GAGNE≤S BOOK [CONDITIONS OF LEARNING[ AND BRUNER≤S BOOK   01607 14
                [THE PROCESS OF EDUCATION[.  HALF THE CLASS WILL READ     01607 15
                BRUNER≤S BOOK, THE OTHER HALF WILL READ GAGNE≤S BOOK.     01607 16
*SETTING        BLANK  COLLEGE                                            01607 10
*MATERIALS      GAGNE≤S THE CONDITIONS OF LEARNING  BRUNER≤S THE PROCESS  01607  5
                OF EDUCATION                                              01607
*LEVEL          ALL GRADES                                                01607  8
*GENERAL        ALL CANDIDATES                                            01607  7
*HOURS          1                                                         01607  6
*EVALUATION     EACH TEACHER WILL BE REQUIRED TO GIVE THE SIGNIFICANT     01607 21
                POINTS GIVEN BY THE OPPOSITE SIDE OF THE DEBATE.  THEY    01607 22
                CAN NOT WRITE ON THE BOOK THEY READ FOR THE DEBATE.       01607 23
*FILE           PROBLEM SOLVING  DISCOVERY LEARNING                       01607  9

*OBJECTIVES     TO SPECIFY THE GENERAL OVERVIEW ON THE TOPIC OF TRANSFER  01608 15
                OF LEARNING.                                              01608 16
*PREREQUISITE NONE                                                        01608 17
*EXPERIENCE     EACH TEACHER IS TO READ AND NOTE THE SIGNIFICANT          01608 11
                CONCLUSIONS IN THE CHAPTER:  [TRANSFER OF TRAINING[ FOUND 01608 12
                IN ESSENTIALS OF LEARNING BY ROBERT M. W. TRAVERS.        01608 13
                MACMILLAN COMPANY:  NEW YORK:  1967.  P. 187 - 218.       01608 14
*SETTING        INDEPENDENT  COLLEGE                                      01608 10
*MATERIALS      BLANK                                                     01608  5
*LEVEL          ALL GRADES                                                01608  8
*GENERAL        ALL CANDIDATES                                            01608  7
*HOURS          1                                                         01608  6
*EVALUATION     LIST THE SIGNIFICANT CONCLUSIONS CONCERNING TRANSFER OF   01608 18
                TRAINING FOUND IN TRAVERS, ESSENTIALS OF LEARNING.        01608 19
*FILE           TRANSFER  LEARNING                                        01608  9

*OBJECTIVES     TO BE ABLE TO LIST THE MAJOR VARIABLES WHICH INFLUENCE    01609 14
                TRANSFER OF TRAINING.                                     01609 15
*PREREQUISITE NONE                                                        01609 16
*EXPERIENCE     THE MAJOR VARIABLES WHICH INFLUENCE TRANSFER OF TRAINING  01609 11
                WILL BE PRESENTED BY THE INSTRUCTOR.  THE STUDENTS WILL   01609 12
```

```
               NOTE THESE VARIABLES FOR LATER USE.  ≥SEE MODULE = 27↑     01609 13
*SETTING       LARGE GROUP  COLLEGE                                       01609 10
*MATERIALS     NONE                                                       01609  5
*LEVEL         ALL GRADES                                                 01609  8
*GENERAL       ALL CANDIDATES                                             01609  7
*HOURS         1                                                          01609  6
*EVALUATION    ESSAY:  WHAT ARE THE MAJOR VARIABLES WHICH INFLUENCE       01609 17
               TRANSFER OF TRAINING^                                      01609 18
*FILE          TRANSFER  LEARNING                                         01609  9
```

```
*OBJECTIVES    TO ILLUSTRATE THE MAJOR VARIABLES WHICH INFLUENCE TRANSFER01610 18
               OF TRAINING.                                               01610 19
*PREREQUISITE EXPERIENCE MODULE 1609                                      01610 20
*EXPERIENCE    EACH TEACHER IS TO ILLUSTRATE BEFORE THE OTHER             01610 11
               CLASSMEMBERS, ONE VARIABLE WHICH INFLUENCES TRANSFER OF    01610 12
               TRAINING.  EACH TEACHER WILL PRESENT TWO SKILLS AND WILL   01610 13
               ROLE-PLAY, GET OUT, OR IN SOMEWAY DEMONSTRATE ONE VARIABLE01610 14
               WHICH DOES OR DOES NOT INFLUENCE TRANSFER BETWEEN THE      01610 15
               TWO SKILLS.  THE OTHERS TEACHERS IN THE CLASS ARE TO TRY   01610 16
               TO GUESS WHICH VARIABLE IS BEING ILLUSTRATED.              01610 17
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                       01610 10
*MATERIALS     NONE                                                       01610  5
*LEVEL         ALL GRADES                                                 01610  8
*GENERAL       ALL CANDIDATES                                             01610  7
*HOURS         1                                                          01610  6
*EVALUATION    EACH TEACHER WILL BE EVALUATED ON HOW WELL HIS OR HER      01610 21
               PRESENTATION ILLUSTRATES TRANSFER OF TRAINING.             01610 22
*FILE          TRANSFER  LEARNING                                         01610  9
```

```
*OBJECTIVES    TO ILLUSTRATE THE THEORIES OF RETENTION.                   01611 16
*PREREQUISITE NONE                                                        01611 17
*EXPERIENCE    A FILM STRIP ILLUSTRATING EACH OF THE MAJOR THEORIES OF    01611 11
               RETENTION WILL BE PRESENTED INDEPENDENTLY TO EACH TEACHER.01611 12
               AS THE FILM STRIP IS BEING SHOWN, EACH TEACHER SHOULD NOTE01611 13
               WHETHER OR NOT HE OR SHE IS RETAINING THE MATERIAL BY THE 01611 14
               METHOD ILLUSTRATED IN THE FILM STRIP.                      01611 15
*SETTING       INDEPENDENT  COLLEGE                                       01611 10
*MATERIALS     FILM STRIPS                                                01611  5
*LEVEL         ALL GRADES                                                 01611  8
*GENERAL       ALL CANDIDATES                                             01611  7
*HOURS         1                                                          01611  6
*EVALUATION    1, LIST THE MAJOR THEORIES OF RETENTION AS ILLUSTRATED BY 01611 18
               THE FILM STRIPS.                                           01611 19
*FILE          RETENTION  LEARNING                                        01611  9
```

```
*OBJECTIVES    TO BE ABLE TO LIST THE VARIABLES WHICH INFLUENCE           01612 16
               RETENTION.                                                 01612 17
*PREREQUISITE EXPERIENCE MODULE 1611                                      01612 18
*EXPERIENCE    AFTER A PERIOD OF ONE WEEK, IN SMALL GROUP, THE TEACHERS   01612 11
               ARE TO DISCUSS WHAT THEY REMEMBER ABOUT THE FILM STRIP.    01612 12
               THEY SHOULD ALSO DISCUSS WHAT THEY COULD HAVE DONE TO      01612 13
               BETTER REMEMBER THE FILM STRIP.  THIS DISCUSSION WILL      01612 14
               CENTER ON THE VARIABLES WHICH INFLUENCE RETENTION.         01612 15
*SETTING       SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                       01612 10
*MATERIALS     NONE                                                       01612  5
*LEVEL         ALL GRADES                                                 01612  8
*GENERAL       ALL CANDIDATES                                             01612  7
*HOURS         1                                                          01612  6
```

```
*EVALUATION    1. A COMPOSITE LIST SHOULD BE DEVELOPED BY EACH GROUP AND 01612 19
               TURNED IN FOR EVALUATION BY THE INSTRUCTOR.               01612 20
*FILE          RETENTION                                                 01612  9
```

```
*OBJECTIVES    TO BE ABLE TO EVALUATE THEORIES OF RETENTION              01613 19
*PREREQUISITE  EXPERIENCE MODULES 1612                                   01613 20
*EXPERIENCE    EACH TEACHER IS TO READ PAGES 39-66 IN LORAGNE, HARRY.    01613 11
               HOW TO DEVELOP A SUPER-POWER MEMORY, FELL, INC: NEW       01613 12
               YORK: 1957. THESE PAGES INCLUDE THE LINK METHOD OF        01613 13
               MEMORY AND THE PEG METHOD OF MEMORY. AFTER READING THESE  01613 14
               PAGES, EACH TEACHER IS TO PREPARE A CRITIQUE OF THE       01613 15
               METHODS USED IN THIS BOOK AND SPECIFY WHICH THEORY        01613 16
               PRESENTED IN EXPERIENCE MODULE = 29 IS MOST RELATED TO    01613 17
               THIS METHOD.                                              01613 18
*SETTING       INDEPENDENT  COLLEGE                                      01613 10
*MATERIALS     BOOK:  LORGNE, HARRY:  HOW TO DEVELOP A SUPER POWER       01613  5
               MEMORY.                                                   01613
*LEVEL         ALL GRADES                                                01613  8
*GENERAL       ALL CANDIDATES                                            01613  7
*HOURS         1                                                         01613  6
*EVALUATION    SPECIFY THE PEG SYSTEM OF EMMORY AND DISCUSS ITS          01613 21
               RELATIONSHIP TO THE INTERPERTENCE THEORY OF THE           01613 22
               BEHAVIORISTS.  ESSAY.                                     01613 23
*FILE          RETENTION  MEMORY  TRANSFER                               01613  9
```

```
*OBJECTIVES    TO BE ABLE TO LIST THE PURPOSES OF EVALUATION AND         01614 15
               MEASUREMENT.                                              01614 16
*PREREQUISITE  NONE                                                      01614 17
*EXPERIENCE    EACH TEACHER IS TO READ AND LIST THE PURPOSES OF          01614 11
               MEASUREMENT AND EVALUATION FOUND IN  CRONBACK, LEE J.     01614 12
               ESSENTIALS OF PSYCHOLOGICAL TESTING SECOND EDITION.       01614 13
               HARPER + ROW:  NEW YORK:  1960  PAGES:  17-37.            01614 14
*SETTING       INDEPENDENT  COLLEGE                                      01614 10
*MATERIALS     NONE                                                      01614  5
*LEVEL         ALL GRADES                                                01614  8
*GENERAL       ALL CANDIDATES                                            01614  7
*HOURS         1                                                         01614  6
*EVALUATION    LIST THE ESSENTIAL DIFFERENCES BETWEEN MEASUREMENT AND    01614 18
               EVALUATION.  WHAT ARE THE MAIN PURPOSES OF EACH^          01614 19
*FILE          MEASUREMENT  TESTING  EVALUATION                          01614  9
```

```
*OBJECTIVES    TO BE ABLE TO LIST THE DIFFERENT KINDS OF VALIDITY.       01615 15
*PREREQUISITE  NONE                                                      01615 16
*EXPERIENCE    EACH TEACHER IS TO READ AND NOTE THE DIFFERENT KINDS OF   01615 11
               VALIDITY AS DISCUSSED IN G. C. HELMSTADTER+ PRINCIPLES OF 01615 12
               PSYCHOLOGICAL MEASUREMENT.  APPLETON-CENTURY=CROFTS.      01615 13
               1964.  CHAPTER 4.                                         01615 14
*SETTING       INDEPENDENT  COLLEGE                                      01615 10
*MATERIALS     BOOKS NOTED ABOVE                                         01615  5
*LEVEL         ALL GRADES                                                01615  8
*GENERAL       ALL CANDIDATES                                            01615  7
*HOURS         1                                                         01615  6
*EVALUATION    LIST THE DIFFERENT KINDS OF VALIDITY AND EXPLAIN WHY EACH 01615 17
               MIGHT BE IMPORTANT IN TESTS AND MEASUREMENT.              01615 18
*FILE          MEASUREMENT  VALIDITY  TESTS                              01615  9
```

```
*OBJECTIVES    TO BE ABLE TO COMPUTE RELIABILITY OF TEST SCORES USING     01616 16
               THE TEST-RETEST METHOD.                                    01616 17
*PREREQUISITE  EACH TEACHER MUST KNOW HOW TO FIGURE CORRELATION           01616 18
               COEFFICIENTS.                                              01616 19
*EXPERIENCE    EACH TEACHER IS GIVEN THE RESULTS OF TWO ADMINISTRATIONS   01616 11
               OF A SINGLE TEST AND THEY ARE TO COMPUTE THE RELIABILITY   01616 12
               OF THE TEST SCORES.  FOLLOWING THE COMPUTATION, THEY ARE   01616 13
               TO HYPOTHESIZE CONCERNING THE WEAKNESSES OF THIS METHOD    01616 14
               FOR FIGURING RELIABILITY.                                  01616 15
*SETTING       INDEPENDENT  COLLEGE                                       01616 10
*MATERIALS     NONE                                                       01616  5
*LEVEL         ALL GRADES                                                 01616  8
*GENERAL       ALL CANDIDATES                                             01616  7
*HOURS         1                                                          01616  6
*EVALUATION    TEST ITEM:  ASK THE TEACHER TO COMPUTE A RELIABILITY VIA   01616 20
               TEST-RETEST METHOD.                                        01616 21
*FILE          TESTING  RELIABILITY  MEASUREMENT                          01616  9
```

```
*OBJECTIVES    FOR TEACHERS TO BE ABLE TO COMPUTE RELIABILITY OF A TEST   01617 18
               VIA SPLIT HALF METHOD.                                     01617 19
*PREREQUISITE  EACH TEACHER MUST KNOW HOW TO FIGURE CORRELATION           01617 20
               COEFFICIENTS.                                              01617 21
*EXPERIENCE    GIVE EACH TEACHER THE RESULTS OF A TEST AND HAVE THEM      01617 11
               FIGURE THE CORRELATION BETWEEN HALVES OF THE TEST.  ALLOW  01617 12
               THEM TO COMPUTE THE RELIABILITY BY SPLITING THE TEST ANY   01617 13
               WAY THEY WISH.  THE CORRELATIONS CAN THEN BE COMPARED.     01617 14
               THE SAME PROCEDURE CAN BE DONE WITH A TEST OF HOMOGENEOUS  01617 15
               ITEMS AND HETEROGENEOUS ITEMS AND THE RESULTS CAN BE       01617 16
               COMPARED.                                                  01617 17
*SETTING       INDEPENDENT  COLLEGE                                       01617 10
*MATERIALS     NONE                                                       01617  5
*LEVEL         ALL GRADES                                                 01617  8
*GENERAL       ALL CANDIDATES                                             01617  7
*HOURS         1                                                          01617  6
*EVALUATION    WHAT IS THE EFFECT OF THE HOMOGENEITY OF ITEMS ON THE      01617 22
               RELIABILITY OF A TEST USING THE SPLIT HALF METHOD OF       01617 23
               RELIABILITY.                                               01617 24
*FILE          RELIABILITY  TESTING  SPLIT HALF                           01617  9
```

```
*OBJECTIVES    TO BE ABLE TO LIST THE DIFFERENT KINDS OF AVAILABLE TESTS  01618 16
               USED IN SCHOOLS.                                           01618 17
*EXPERIENCE    EACH TEACHER IS TO SEARCH BUROS, MENTAL MEASUREMENTS       01618 11
               YEARBOOK AND RECORD THE DIFFERENT CLASSIFICATIONS OF       01618 12
               AVAILABLE TESTS.  FOR EACH CLASSIFICATION, THERE SHOULD BE01618 13
               SOME NOTATION AS TO THE GENERAL CHARACTERISTICS OF THAT    01618 14
               CLASSIFICATION.                                            01618 15
*SETTING       INDEPENDENT  COLLEGE                                       01618 10
*MATERIALS     BUROS, MENTAL MEASUREMENT YEARBOOK.                        01618  5
*LEVEL         ALL GRADES                                                 01618  8
*GENERAL       ALL CANDIDATES                                             01618  7
*HOURS         1                                                          01618  6
*PREREQUISITE  NONE                                                       01618 18
*EVALUATION    LIST FIVE MAJOR CLASSIFICATIONS OF TESTS AND GIVE THE      01618 19
               GENERAL CHARACTERISTICS OF EACH CLASSIFICATION.            01618 20
*FILE          TESTS  STANDARDIZED TESTS  MEASUREMENT                     01618  9
```

```
*OBJECTIVES    TO BE ABLE TO COMPUTE STATISTICAL TESTS ESSENTIAL FOR      01619 14
               TEST INTERPRETATION.                                       01619 15
*PREREQUISITE  NONE                                                       01619 16
```

```
*EXPERIENCE    PROGRAM THE COMPUTER TO HAVE A PROGRAMMED LEARNING COURSE 01619 11
               IN STATISTICS. EACH STUDENT WILL BE REQUIRED TO COMPLETE  01619 12
               THE SEQUENCES IN STATISTICS.                              01619 13
*SETTING       INDEPENDENT  COLLEGE                                      01619 10
*MATERIALS     COMPUTER PROGRAM IN STATISTICS.                           01619  5
*LEVEL         ALL GRADES                                                01619  8
*GENERAL       ALL CANDIDATES                                            01619  7
*HOURS         5-10                                                      01619  6
*EVALUATION    GIVE EACH TEACHER A SET OF DATA AND REQUIRE THEM TO       01619 17
               COMPUTE APPROPRIATE STATISTICS.                           01619 18
*FILE          TESTS  MEASUREMENT  STATISTICS                            01619  9

*OBJECTIVES    FOR TEACHER TO BE ABLE TO SUMMARIZE THE RESULTS OF TESTS. 01620 15
*PREREQUISITE  EXPERIENCE MODULES 1618 + 19.                             01620 16
*EXPERIENCE    A PANEL OF EDUCATIONAL PSYCHOLOGISTS ARE TO INTERPRETATE  01620 11
               THE RESULTS OF SEVERAL TESTS BEFORE THE GROUP OF TEACHERS.01620 12
               EACH TEACHER IS TO HAVE A COPY OF THE TEST AS THE         01620 13
               PSYCHOLOGISTS REVIEW EACH TEST.                           01620 14
*SETTING       LARGE GROUP  COLLEGE                                      01620 10
*MATERIALS     DATA FROM SEVERAL TESTS.                                  01620  5
*LEVEL         ALL GRADES                                                01620  8
*GENERAL       ALL CANDIDATES                                            01620  7
*HOURS         1                                                         01620  6
*EVALUATION    GIVE EACH TEACHER DATA FROM TESTS AND ASK THEM TO WRITE   01620 17
               AN INTERPRETATION OF THE RESULTS.                         01620 18
*FILE          TESTS  MEASUREMENT                                        01620  9

*OBJECTIVES    TO DISTINGUISH BETWEEN TEACHER-MADE AND STANDARDIZED      01621 17
               TEST OF ACHIEVEMENT.                                      01621 18
*EXPERIENCE    EACH TEACHER IS TO TURN IN A TEACHER MADE ACHIEVEMENT     01621 11
               TEST.  AN AUTHORITY ON TESTS + MEASUREMENT SUCH AS        01621 12
               DR. ROBERT EBEL WILL EVALUATE EACH TEST BEFORE THE GROUP  01621 13
               POINTING OUT THE SIGNIFICANT DIFFERENCE BETWEEN THAT TEST 01621 14
               AND A STANDARDIZED TEST.  EACH TEACHER IS TO NOTE THOSE   01621 15
               SIGNIFICANT DIFFERENCES.                                  01621 16
*SETTING       BLANK  COLLEGE                                            01621 10
*MATERIALS     NONE                                                      01621  5
*LEVEL         ALL GRADES                                                01621  8
*GENERAL       ALL CANDIDATES                                            01621  7
*HOURS         1                                                         01621  6
*PREREQUISITE  NONE                                                      01621 19
*EVALUATION    LIST FOUR SIGNIFICANT DIFFERENCES BETWEEN TEACHER MADE    01621 20
               TESTS AND STANDARDIZED TESTS.                             01621 21
*FILE          TESTING  MEASUREMENT  ACHIEVEMENT TESTS                   01621  9

*OBJECTIVES    TO BE ABLE TO RECALL THE CRITERIA FOR GOOD TEST ITEMS.    01622 15
*PREREQUISITE  NONE                                                      01622 16
*EXPERIENCE    EACH TEACHER IS TO READ EBEL, ROBERT L. [WRITING THE      01622 11
               TEST ITEM[  CHAPTER 7 IN E. F. LINDQUIST, EDITOR,         01622 12
               EDUCATIONAL MEASUREMENT.  WASHINGTON, D. C. AMERICAN      01622 13
               COUNCIL ON EDUCATION.  1951.                              01622 14
*SETTING       INDEPENDENT  COLLEGE                                      01622 10
*MATERIALS     BOOK NOTED ABOVE                                          01622  5
*LEVEL         ALL GRADES                                                01622  8
*GENERAL       ALL CANDIDATES                                            01622  7
*HOURS         1-2                                                       01622  6
*EVALUATION    LIST THE MAJOR CHARACTERISTICS OF GOOD TEST ITEMS AS      01622 17
               SPECIFIED BY DR. EBEL.                                    01622 18

*FILE          TESTING  OBJECTIVE ITEMS  ACHIEVEMENT TESTS               01622  9
```

```
*OBJECTIVES     TO BE ABLE TO CONSTRUCT GOOD OBJECTIVE ITEMS FOR AN          01623 17
                ACHIEVEMENT TEST.                                            01623 18
*PREREQUISITE   EXPERIENCE MODULE 1622.                                      01623 19
*EXPERIENCE     EACH TEACHER IS TO WRITE FIVE OBJECTIVE TYPE ITEMS FOR       01623 11
                SMALL GROUP WORK.  TAKING TURNS, EACH TEACHER IS TO READ     01623 12
                ONE ITEM TO THE SMALL GROUP AND THE GROUP IS TO EVALUATE     01623 13
                THE ITEM AND HELP THE INDIVIDUAL IMPROVE IT.  EVALUATION     01623 14
                IS TO BE BASED ON CRITERIA FOUND IN EXPERIENCE MODULE        01623 15
                = 39.                                                        01623 16
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                         01623 10
*MATERIALS      NONE                                                         01623  5
*LEVEL          ALL GRADES                                                   01623  8
*GENERAL        ALL CANDIDATES                                               01623  7
*HOURS          1                                                            01623  6
*EVALUATION     FOLLOWING THE IMPROVEMENT OF EACH ITEM, A COMPOSITE TEST     01623 20
                IS TO BE MADE UP AND ITEM ANALYSIS SHOULD GIVE DATA AS TO    01623 21
                THE QUALITY OF EACH INDIVIDUAL ITEM,                         01623 22
*FILE           TESTING  ACHIEVEMENT TESTS  OBJECTIVE ITEMS                  01623  9
```

```
*OBJECTIVES     TO BE ABLE TO CONSTRUCT VARIED ESSAY TEST ITEMS.             01624 15
*PREREQUISITE   NONE                                                         01624 16
*EXPERIENCE     EACH TEACHER IS TO READ AND SUMMARIZE:  EREL, ROBERT L.      01624 11
                MEASURING EDUCATIONAL ACHIEVEMENT.  ENGLEWOOD CLIFFS,        01624 12
                N. J. PRENTICE-HALL, 1965.  EACH TEACHER IS TO READ THE      01624 13
                CHAPTER ON ESSAY TESTS.                                      01624 14
*SETTING        INDEPENDENT  COLLEGE                                         01624 10
*MATERIALS      BOOK NOTED ABOVE.                                            01624  5
*LEVEL          ALL GRADES                                                   01624  8
*GENERAL        ALL CANDIDATES                                               01624  7
*HOURS          1                                                            01624  6
*EVALUATION     EACH TEACHER IS TO WRITE ONE ESSAY ITEM AND GIVE THE ITEM    01624 17
                TO THE INSTRUCTOR FOR EVALUATION.                            01624 18
*FILE           ESSAY TESTS  MEASUREMENT  ACHIEVEMENT TESTS                  01624  9
```

```
*OBJECTIVES     TO DETERMINE DIFFERENT METHODS OF GRADING.                   01625 16
*PREREQUISITE   NONE                                                         01625 17
*EXPERIENCE     TEACHERS ARE TO SURVEY LOCAL SCHOOLS TO DETERMINE THE        01625 11
                DIFFERENT METHODS OTHER TEACHERS USE FOR GRADING OF          01625 12
                STUDENTS.  A SUMMARY OF THE METHODS IS TO BE COMPILED        01625 13
                AND A COMPOSITE LIST OF METHODS IS TO BE DISTRIBUTED TO      01625 14
                THE TEACHERS.                                                01625 15
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COMMUNITY SCHOOLS.              01625 10
*MATERIALS      NONE                                                         01625  5
*LEVEL          ALL GRADES                                                   01625  8
*GENERAL        ALL CANDIDATES                                               01625  7
*HOURS          1                                                            01625  6
*EVALUATION     LIST FIVE DIFFERENT METHODS OF GRADING STUDENTS≤             01625 18
                ACHIEVEMENT.                                                 01625 19
*FILE           GRADING  MEASUREMENT  TESTING                                01625  9
```

```
*OBJECTIVES     TO BE ABLE TO SUMMARIZE THE THOUGHTS OF STUDENTS             01626 15
                REGARDING THE IMPROVEMENT OF GRADING METHODS.                01626 16
*PREREQUISITE   NONE                                                         01626 17
*EXPERIENCE     A PANEL OF STUDENTS ≥DIFFERENT GRADE LEVELS† ARE TO          01626 11
                PRESENT THEIR IDEAS AS TO HOW GRADING SYSTEMS CAN BE         01626 12
                IMPROVED.  THE TEACHERS ARE TO REACT TO THE PANEL≤S          01626 13
                COMMENTS IN SMALL GROUPS.                                    01626 14
*SETTING        LARGE GROUP  COLLEGE                                         01626 10
*MATERIALS      NONE                                                         01626  5
*LEVEL          ALL GRADES                                                   01626  8
*GENERAL        ALL CANDIDATES                                               01626  7
*HOURS          1                                                            01626  6
*EVALUATION     ASK THE TEACHERS TO RECALL SPECIFIC COMMENTS WHICH PANEL     01626 18
                MEMBERS MADE REGARDING THE IMPROVEMENT OF GRADING METHODS.   01626 19
*FILE           TESTING  MEASUREMENT  GRADING                                01626  9
```

ADVANCED BEHAVIORAL SCIENCE STUDY IN SOCIAL-PHILOSOPHICAL FOUNDATIONS OF EDUCATION

Although the format and framework of a graduate experience in social-philosophical foundations of education is tentative, the basic objective is to give the teacher an opportunity for practical experience in community analysis. In particular, the emphasis is placed on examining the unique relationships existing between schools and the communities they serve. To enhance an in-depth analysis of these relationships, this experience is supervised and directed by an interdisciplinary faculty team composed of representatives of the Departments of Sociology, Anthropology, Philosophy, and Education. In the best sense of the word, the course is conducted as a work-study seminar in which students have an opportunity for both in-class discussion and out-of-class field work in the community.

This work-study seminar serves as a core around which a more complete program is built. Aside from this core experience, students may also take advanced work in guidance and personnel services, history of education, curriculum innovation and improvement, administrative leadership, and issues in education.

The first three or four weeks of the seminar take place on a college campus or in a clinic-school center. During this period students have concentrated work in the relationships among sociology, anthropology, philosophy, and education. Specialists from each of these disciplines conduct these sessions. The primary objective is to give students a broad interdisplinary background to serve as the framework within which they would conduct their community-school research and analysis.

A brief outline of the material studied and discussed during the first part of the siminar follows:

A. Some contributions of sociology to the field of education.
   1. The school system as a formal organization.
   2. The classroom as a social system.
   3. The external environment and the school.

B. Cultural anthropology and education.
   1. The value system of a modern culture.
   2. Community studies and techniques of the anthropologist.
   3. Culture and personality.
   4. Anthropology and human nature.

C. Social foundations as a field of study in education

D. Applications of philosophy to education.
   1. The meaning of education
   2. The scope of educational philosophy.
   3. The relationships of metaphysics, epistemology, ethics, and logic to education.
   4. Logic, psychology, and educational methodology.

E. Research techniques in the social and behavioral science.

At the end of this introductory period, teachers make an in-depth study of the community and schools. The range and design of each individual study would be approved by the faculty team. Students continue to attend a weekly seminar during which time they make progress reports on their studies, discuss common research problems, and compare observations.

At the end of the work-study seminar, each student presents the analysis of community-school investigation to a panel of faculty members and to his peers. The faculty and students critically analyze the quality and scope of the research papers and make such recommendations as seen appropriate.

```
*OBJECTIVES     TO IDENTIFY AND RRESENT SEVERAL DIVERGENT VIEWS              01523 15
                CONCERNING THE QUESTION OF NON-PUBLIC EDUCATION IN THE       01523 16
                UNITED STATES.                                               01523 17
*PREREQUISITE   PREVIOUS MODULE                                              01523 18
*EXPERIENCE     VIEW A PANEL DISCUSSION PRESENTED BY REPRESENTATIVES OF      01523 11
                VARIOUS COMMUNITY GROUPS FOCUSED ON THE QUESTION OF          01523 12
                NON-PUBLIC EDUCATION.  ≥PANEL CONSISTS OF REPRESENTATIVES    01523 13
                OF VARIOUS RELIGIOUS GROUPS - LAWYERS IF POSSIBLE.†          01523 14
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                         01523 10
*MATERIALS      NONE                                                         01523  5
*LEVEL          ALL GRADES                                                   01523  8
*GENERAL        ALL CANDIDATES                                               01523  7
*HOURS          BLANK                                                        01523  6
*EVALUATION     PANEL AND READING WILL BE DISCUSSED IN SUBSEQUENT MODULES.01523 19
*FILE           NON-PUBLIC EDUCATION  PHILOSOPHY                             01523  9
```

```
*OBJECTIVES     TO CLARIFY THE QUESTION OF NON-PUBLIC EDUCATION AND TO       01524 13
                RELATE THAT QUESTION TO BASIC PHILOSOPHICAL STANCES.         01524 14
*PREREQUISITE   PRECEDING MODULES                                            01524 15
*EXPERIENCE     DISCUSS THE QUESTIONS OF PUBLIC AID TO AND PUBLIC            01524 11
                CONTROL OF NON-PUBLIC EDUCATION.                             01524 12
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                         01524 10
*MATERIALS      NONE                                                         01524  5
*LEVEL          ALL GRADES                                                   01524  8
*GENERAL        ALL CANDIDATES                                               01524  7
*HOURS          BLANK                                                        01524  6
*EVALUATION     OBSERVATION OF THE DEGREE OF PARTICIPATION.                  01524 16
*FILE           PUBLIC AID  PHILOSOPHY  PUBLIC CONTROL OF NON-PUBLIC         01524  9
                SCHOOLS                                                      01524
```

```
*OBJECTIVES     TO INTRODUCE THE QUESTION OF SCHOOL FINANCE.                 01525 15
*PREREQUISITE   NONE                                                         01525 16
*EXPERIENCE     READ:  GEZI, KALIL I. AND MEYERS, JAMES E., TEACHING IN      01525 11
                AMERICAN CULTURE, [THE SUPPORT OF AMERICAN SCHOOLS[:  TEN    01525 12
                QUESTIONS ON SCHOOL FINANCE[, A SELECTION FROM A REPORT      01525 13
                BY THE NEA COMMISSION ON SCHOOL FINANCE, PP. 297-301†        01525 14
*SETTING        INDEPENDENT  COLLEGE                                         01525 10
*MATERIALS      REPRINTS OF THE ARTICLE.                                     01525  5
*LEVEL          ALL GRADES                                                   01525  8
*GENERAL        ALL CANDIDATES                                               01525  7
*HOURS          1/4 - 1/2                                                    01525  6
*EVALUATION     MATERIAL WILL BE DISCUSSED IN SUBSEQUENT MODULES.            01525 17
*FILE           FINANCE  PHILOSOPHY  BUSINESS OPERATIONS                     01525  9
```

```
*OBJECTIVES     TO INVESTIGATE THE QUESTION OF SCHOOL FINANCE THROUGH        01526 14
                DISCUSSION AND TO RELATE THAT QUESTION TO BASIC              01526 15
                PHILOSOPHICAL STANCES.                                       01526 16
*PREREQUISITE   PREVIOUS MODULE                                              01526 17
*EXPERIENCE     DISCUSS CURRENT PRACTICES OF FINANCING SCHOOLS, THE          01526 11
                PROBLEMS OF SCHOOL FINANCE AND SUGGEST ALTERNATIVE           01526 12
                APPROACHES IN FINANCE.                                       01526 13
*SETTING        SMALL GROUP ≥1-12 STUDENTS†  COLLEGE                         01526 10
*MATERIALS      BLANK                                                        01526  5
*LEVEL          ALL GRADES                                                   01526  8
*GENERAL        ALL CANDIDATES                                               01526  7
*HOURS          1 - 1 1/2                                                    01526  6
*EVALUATION     OBSERVATION OF THE DEGREE OF PARTICIPATION.                  01526 18
*FILE           FINANCING  PHILOSOPHY                                        01526  9
```

```
*OBJECTIVES     TO INVESTIGATE THE QUESTION OF SCHOOL LAW AND TO PRESENT     01527 17
                SEVERAL VIEWS CONCERNING THIS QUESTION.                      01527 18
*PREREQUISITE   NONE                                                         01527 19
*EXPERIENCE     A DIALOGUE OR PANEL DISCUSSION AMONG VARIOUS MEMBERS         01527 11
```

```
                OF THE LOCAL EDUCATIONAL COMMUNITY FOCUSED ON THE LEGAL    01527 12
                AND EXTRA-LEGAL RIGHTS, RESPONSIBILITIES AND LIMITATIONS   01527 13
                OF THE TEACHER.  THE PANEL SHOULD CONSIST OF THE LOCAL     01527 14
                SCHOOL BOARD LAWYER, THE SCHOOL SUPERINTENDENT AND/OR      01527 15
                PRINCIPAL AND A REPRESENTATIVE OF THE CEA.                 01527 16
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COMMUNITY                     01527 10
*MATERIALS      BLANK                                                      01527  5
*LEVEL          ALL GRADES                                                 01527  8
*GENERAL        ALL CANDIDATES                                             01527  7
*HOURS          2                                                          01527  6
*EVALUATION     OBSERVATION OF THE DEGREE OF PARTICIPATION.                01527 20
*FILE           LEGAL RIGHTS  PHILOSOPHY  SCHOOL LAW                       01527  9

*OBJECTIVES     TO INTRODUCE THE QUESTION OF TEACHING AS A PROFESSION.     01528 14
*PREREQUISITE NONE                                                         01528 15
*EXPERIENCE     READ:  BLACKINGTON≤S 450 HANDOUT.  GEZI, KALIL I. AND      01528 11
                MEYERS, JAMES E., TEACHING IN AMERICAN CULTURE, [IS        01528 12
                TEACHING A PROFESSION[, PP. 335-349.                       01528 13
*SETTING        INDEPENDENT  COLLEGE                                       01528 10
*MATERIALS      REPRINTS OF ARTICLES                                       01528  5
*LEVEL          ALL GRADES                                                 01528  8
*GENERAL        ALL CANDIDATES                                             01528  7
*HOURS          1 - 1 1/2                                                  01528  6
*EVALUATION     MATERIAL WILL BE DISCUSSED IN SUBSEQUENT MODULES.          01528 16
*FILE           TEACHING PROFESSION  PHILOSOPHY                            01528  9

*OBJECTIVES     TO PRESENT A DIALOGUE CONCERNING THE QUESTION OF           01529 15
                TEACHERS ORGANIZATIONS.                                    01529 16
*PREREQUISITE PREVIOUS MODULES                                             01529 17
*EXPERIENCE     VIEW A PANEL DISCUSSION OR DEBATE BETWEEN REPRESENTATIVES  01529 11
                OF THE LOCAL CEA AND THE AFT LOCAL.  THE PRESENTATION      01529 12
                WILL CONCENTRATE ON THE ROLE OF THE TEACHER AND TEACHERS   01529 13
                ORGANIZATIONS.                                             01529 14
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COMMUNITY                     01529 10
*MATERIALS      BLANK                                                      01529  5
*LEVEL          ALL GRADES                                                 01529  8
*GENERAL        ALL CANDIDATES                                             01529  7
*HOURS          1 - 2                                                      01529  6
*EVALUATION     PRESENTATION WILL BE DISCUSSED IN SUBSEQUENT MODULES.      01529 18
*FILE           INTEREST GROUPS  PHILOSOPHY  TEACHER ORGANIZATIONS         01529  9

*OBJECTIVES     TO CLARIFY AND INVESTIGATE THE QUESTION OF TEACHER         01530 14
                ORGANIZATIONS AND THEIR FUNCTION.                          01530 15
*PREREQUISITE PREVIOUS MODULES                                             01530 16
*EXPERIENCE     DISCUSS THE QUESTION OF TEACHERS ORGANIZATIONS, THEIR      01530 11
                ROLE AND THE RELATED QUESTION OF THE WITHDRAWAL OF         01530 12
                SERVICES BY TEACHERS.                                      01530 13
*SETTING        SMALL GROUP ≥1-12 STUDENTS↑  COLLEGE                       01530 10
*MATERIALS      NONE                                                       01530  5
*LEVEL          ALL GRADES                                                 01530  8
*GENERAL        ALL CANDIDATES                                             01530  7
*HOURS          1 - 2                                                      01530  6
*EVALUATION     OBSERVATION OF THE DEGREE OF PARTICIPATION.                01530 17
*FILE           TEACHER STRIKES  PHILOSOPHY  TEACHER ORGANIZATIONS         01530  9

*OBJECTIVES     TO INTRODUCE THE QUESTION OF TEACHER EVALUATION.           01531 14
*PREREQUISITE NONE                                                         01531 15
```

```
*EXPERIENCE    READ:  GEZI, KALIL I. AND MEYERS, JAMES E., TEACHING IN      01531 11
               AMERICAN CULTURE, [RESEARCH ON TEACHER EVALUATION], A        01531 12
               SELECTION BY N. A. FATTU, PP. 302-317.                      01531 13
*SETTING       INDEPENDENT  COLLEGE                                        01531 10
*MATERIALS     REPRINTS OF ABOVE.                                          01531  5
*LEVEL         ALL GRADES                                                  01531  8
*GENERAL       ALL CANDIDATES                                              01531  7
*HOURS         1/2                                                         01531  6
*EVALUATION    MATERIAL WILL BE DISCUSSED IN SUBSEQUENT MODULES.           01531 16
*FILE          EVALUATION  PHILOSOPHY  EFFECTIVENESS OF TEACHING           01531  9

*OBJECTIVES    TO CLARIFY THE QUESTION OF TEACHER EVALUATION THROUGH       01532 13
               DISCUSSION AND RELATE THAT QUESTION TO BASIC BELIEFS        01532 14
               AND OBJECTIVES.                                             01532 15
*PREREQUISITE  PREVIOUS MODULE                                             01532 16
*EXPERIENCE    DISCUSS THE QUESTION OF TEACHER EVALUATION IN RELATION      01532 11
               TO BASIC BELIEFS AND GOALS.                                 01532 12
*SETTING       SMALL GROUP ≥1-12 STUDENTS+  COLLEGE                        01532 10
*MATERIALS     NONE                                                        01532  5
*LEVEL         ALL GRADES                                                  01532  8
*GENERAL       ALL CANDIDATES                                              01532  7
*HOURS         1                                                           01532  6
*EVALUATION    OBSERVATION OF THE DEGREE OF PARTICIPATION.                 01532 17
*FILE          EVALUATION  PHILOSOPHY  GOALS + OBJECTIVES OF TEACHING.     01532  9

*OBJECTIVES    TO FAMILIARIZE THE STUDENT WITH WHAT IS INVOLVED IN THE     01533 13
               CONCEPT PROFESSION.                                         01533 14
*PREREQUISITE  STUDENT TEACHING                                            01533 15
*EXPERIENCE    DISCUSSION OF THE CRITERIA UNDERLYING [PROFESSION].         01533 11
               WHAT ARE THEY, AND DOES TEACHING FIT THE CRITERIA^          01533 12
*SETTING       BLANK  COLLEGE                                              01533 10
*MATERIALS     MIMEOGRAPHED HAND-OUT.  BLACKINGTON, THE PROFESSIONS        01533  5
*LEVEL         ALL GRADES                                                  01533  8
*GENERAL       ALL CANDIDATES                                              01533  7
*HOURS         2                                                           01533  6
*EVALUATION    BLANK                                                       01533 16
*FILE          PROFESSION  CRITERIA  ANALYSIS OF TEACHERS ROLE             01533  9

*OBJECTIVES    TO FAMILIARIZE THE STUDENT ≥INTERN+ WITH THE LEGAL          01534 15
               STATUS OF THE TEACHING PROFESSION.                          01534 16
*PREREQUISITE  STUDENT TEACHING                                            01534 17
*EXPERIENCE    A ONE HOUR LECTURE ON THE LEGAL RIGHTS AND                  01534 11
               RESPONSIBILITIES OF THE TEACHER, PREFERABLY GIVEN BY        01534 12
               A LAWYER IN THE COMMUNITY.  LECTURE TO BE FOLLOWED BY       01534 13
               DISCUSSION PERIOD LED BY THE LAWYER.                        01534 14
*SETTING       INDEPENDENT  10 - 15  COMMUNITY  + SCHOOL                   01534 10
*MATERIALS     BLANK                                                       01534  5
*LEVEL         ALL GRADES                                                  01534  8
*GENERAL       ALL CANDIDATES                                              01534  7
*HOURS         1 1/2                                                       01534  6
*EVALUATION    BLANK                                                       01534 18
*FILE          SCHOOL LAW  PHILOSOPHY  LEGAL RIGHTS.                       01534  9
```

SECTION VIII

CONTINUED PROFESSIONAL DEVELOPMENT

Behavioral Science Elementary Teacher Education Program

Michigan State University

1968

SECTION VIII

CONTINUED PROFESSIONAL DEVELOPMENT

The demands of maintaining professional currency in the classroom and developing teacher capacilities in this radically changing age have overwhelmed the piece-meal resources of contemporary teacher service agencies. Within the last fifteen years content to be mastered by pupils have radically changed. The public has focused its concern and attention on education as evidenced by the money, time, and personnel which the government has poured into the educational enterprise. Because of the national concern and attention focused upon education the classroom teacher finds it imperative to be both well informed in discipline content and competent in the methods and techniques of teaching. The completion of pre-service teacher education requirements are only the beginning of a professional teacher's development. The graduate programs provided by the university graduate schools and the in-service education provided by the local school districts are no longer adequate to meet the needs of the professional teacher. These needs can be met best by a program which integrates the resources of universities, local school districts, community agencies, professional organizations, and state departments of education.

The Clinic-school Network as described in this model, marshalls and integrates the resources of all agencies concerned with teacher education, and thus can provide the ideal setting to maintain professional currency and develop teacher capabilities. The resources of the university are especially significant in developing a system of experiences for the professional growth of the network personnel.

The university harbors a multitude of new developments in new emergent fields (e.g., systems analysis, game theory, information and communication theory, etc.), all of which should be critically surveyed for potential application to the teaching field. Evolving content of the elementary curriculum, new approaches to instruction, improved management schemes, and refined knowledge of human behavior all can be more rapidly integrated into elementary school operation with those working relations with a university. Faculty teams from the new developmental fields can be organized as special task force inputs to the Clinic-School Network.

In turn, faculty from elementary schools improve preservice education by periodically working as curriculum developers, working directly with pre-service teachers, suggesting improved approaches, and inputing appropriate simulated, photographed, or described educational episodes into the pre-service program. This function is consistent with the clinic model in which practice derives theory which derives improved practice then refined theory. The cooperative Clinic-School arrangement contributes to a meaningful development of this theory-practice cycle. But it draws upon the cycle in improved staff performance.

This Clinic-School Network was described from the clinical perspective in Section III while the management aspects are included in Section IX. The following description provides some background from the perspective of continued professional growth of the elementary faculty.

THE CLINIC-SCHOOL NETWORK

The Clinic-School Network effectively focuses the training resources of several educational agencies upon individual elementary schools called clinic-schools. The most critical arena of pupil-teacher interaction--the elementary school classroom--has too long served as the remote end-point of lengthy teacher preparation. The elementary school classroom, not the college classroom, must become the prime source and focus of experience for the prospective teacher from his earliest commitment to the profession as an undergraduate. This description of the Clinic-school Network includes discussion of the Network Objectives, the Nework Organization (including Resource Agencies, Coordinating Committees, and Clinic-Schools) and the Network Personnel.

NETWORK OBJECTIVES

To serve children with more capable, better motivated teachers the Network has been designed to integrate the efforts of several resource agencies in order to:

1. Replace uncoordinated, piece-meal agency response to teacher preparation needs with a sequential, comprehensive, integrated application of various agency resources to the developmental requirements of each individual teacher.

2. Create a professional environment where dialogue between university, school district, and educational agency personnel can focus on improving curricular and methodological theory and practice, school district operation, and teacher preparation and development.

3. Design and implement an entry pattern into the professional environment for teacher trainees which encourages teacher demand for a balanced interaction of theory, practice and enlargement of professional capabailities.

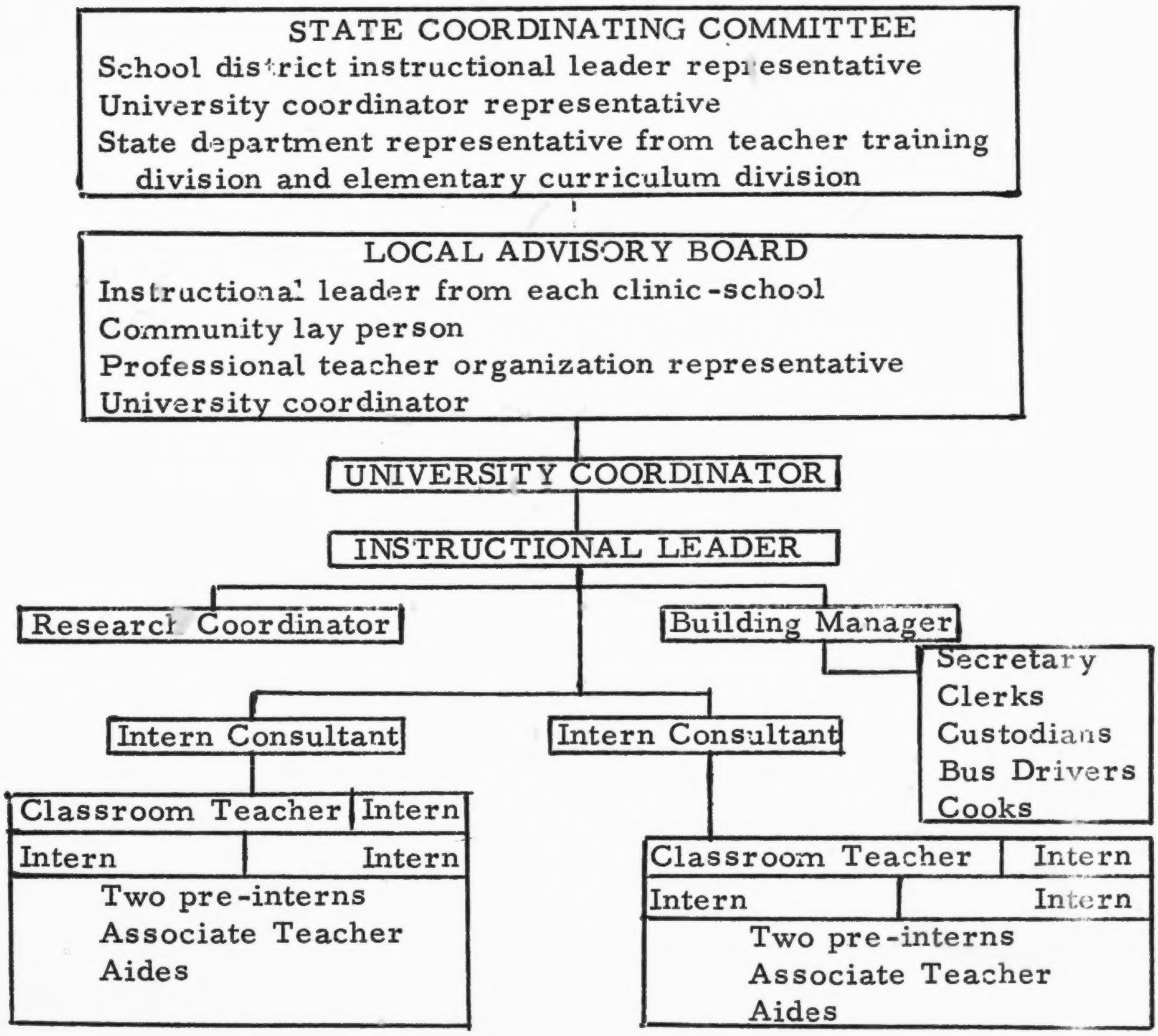
4. Develop a teacher preparation program model which has maximum sensitivity to the growth and need patterns of the individual teacher, and which provides an optimal environment for systematic research regarding these growth and need patterns.

5. Provide a clinical setting for teaching pupils which encourages maximum development of professional skills among teachers, and which makes cooperation and coordination among practitioners, trainers, and researchers an accepted norm of the professional teaching community.

NETWORK ORGANIZATION

The following chart schematically presents one possible organization of the major structural units in a Clinic-School Network.

THE CLINIC-SCHOOL NETWORK



SUPPORTIVE STAFF

- University Training and Research Consultants
- Psychologist
- Community Agencies
- School Social Worker
- Speech Correctionist
- Diagnostician
- Nurse
- Subject Area Specialists
- Counselor-community Agent
- Audio-Visual Librarian

Resource Agencies -- The Clinic-School Network serves its personnel by marshalling and integrating the resources of the following agencies all of which exercise traditional teacher service roles:

1. participating school systems,
2. university,
3. community agencies involved in school support (Parent-Teacher Organizations, Child Guidance Clinic, welfare agencies, community health services, legal aid societies, and others),
4. state department of education, and
5. professional teacher organizations.

The resources of these agencies are marshalled and integrated by two coordinating committees.

State Coordinating Committee --This committee is responsible for opening avenues of communication among all resource agencies concerned with the education of children and teacher preparation. Representatives of the state department of education, the professional teacher organizations, the participating school districts and universities act in an advisory capacity to each Local Project Advisory Board and to the Network Project Planning Board.

Local Advisory Board --This Committee develops clinic-school policies concerning curriculum and teacher preparation. These policies are based upon feedback from the Network Advisory Board and The Network Project Planning Board, the participating local clinic-school personnel, and the community. Policies are implemented in each clinic-school by a key executive body composed of the university coordinator and the instructional leader of the clinic-school. The Local Advisory Board is responsible to and has representation on the Network Advisory Board to facilitate two-way communication between the advisory committee and the local clinic-schools.

Clinic-school--The clinic-school is the key physical unit which provides the requisite setting for the following:

1. Teacher trainees to have an opportunity to work in a total elementary school program with a variety of teacher models.
2. The classroom teacher to share his experiences with more than the single intern normally assigned in pre-teaching systems.
3. The observation and involvement of university personnel who instruct teacher trainees, conduct research, or develop instructional materials for teacher education.
4. The community to channel its resources to the network personnel.
5. The demonstration of innovations in teacher preparation, school administration, and curriculum development.

NETWORK PERSONNEL

The main population which the Network is designed to serve consists of pre-interns, interns, classroom teachers already established in the teaching profession, and professional instructional leaders (post-MA teachers with well developed clinical behavior style, leadership ability, and demonstrated success in teaching). It is entirely possible and even desirable for an individual to enter a Network as a pre-intern and continue to extend depth of understanding and responsibility through a series of various capacities during his entire professional career.

The resource agency participants in the Network form a second group of network personnel. They stand to gain immeasurably in terms of new perceptions of the teacher preparation problem and the formation of new inter-agency channels of cooperation which augment their teacher service potential. Thus these administrators, trainers, and researchers are themselves learners in the Network.

University Coordinator --The university coordinator is responsible for moderating the resource agencies which provide major Network input. He is an advisor to the local coordinating committee, acts as the major link in the Network with the university, provides teacher education leadership, and coordinates university faculty resources to clinic schools.

Research Coordinator--The research coordinator is responsible for planning and regulating all research efforts in the Network structure. He works as a member of the Evaluations Subsystem in operating the Network. Program evaluation and data collection are functions of this office.

Professional Instructional Leader--Professional instructional leaders represent a level of competence in teaching rather than a defined role. Through advanced education and demonstrated proficiency in educational endeavors, the individual broadens the scope of his job. Although he may continue to work with pupils, his primary role is working with teachers. He may become a school principal (with non-instructional chores relegated to a non-professional building manager), an intern consultant, a subject specialist, a curriculum developer, a counselor, a team-teaching leader, an instructional media center director, or pre-service teacher trainer. In a later part of of this section, the role and training of an instructional media specialist is described to illustrate the way in which a professional instructional leader might work in a school, and his education for such a role.

Intern Consultant--The primary task of the intern consultant is to work with five or six interns. Fiscal arrangements relative to such an arrangement are discussed in Section IX, the Clinical Experiences Subsystem, in a description of the Elementary Intern Program. But this is but one of many potential organizational plans in which he could function. For example, he could direct a team of one classroom teacher, three interns, two per-interns, an associate teacher, and an aide. In such a role he assumes some classroom planning and instructional responsibilities, acting as classroom demonstrator and working closely with supportive staff to insure maximum professional development of each team member. This organization plan is illustrated in the previous chart.

Classroom Teacher and Interns--The teacher and interns are responsible for planning, implementing, and evaluating the classroom program. They also assist in the planning, implementing, and evaluating of the teacher preparation program.

Pre-Intern Trainee--The pre-intern trainee observes and participates in both classroom and teacher preparation activities in addition to theory and content work sessions.

Associate Teacher and Aide--The Associate Teacher has had some basic training and works on specialized assignments with children under the direction of a professional teacher. The aide completes clerical and housekeeping tasks requiring no special training other than that provided on the job. Both of these roles are more fully described in the last part of this section, and the Associate Teacher training program is outlined to illustrate the way in which a paraprofessional training program can be coordinated with the teacher preparation model.

Building Manager--The building manager coordinates non-instructional services and evaluates non-instructional personnel within the clinic-school.

These sketches of the responsibilities and activities of the network personnel are supplemented by material in clinical experiences (Section III). Because the Clinic-School Network is an adaptive system for teacher preparation, the functions of the structural units and the unit personnel must remain flexible and open to redefinition as the Network operates.

RESOURCED TEACHING

Continued consultation should be provided for the teacher during his first two or three years of teaching. During this time he is guided in an exploration of the competencies he should develop. A Professional Instructional Leader familiar with the various programs which a teacher may pursue could serve several teachers in a seminar. The Professional Instructional Leader helps the teacher to systematically evaluate himself to determine his strengths and weaknesses and to plan his program based on this knowledge. Psychologist and counselors from the university may be secured as needed for indivudual teachers, and other clinically competent personnel may be resource persons for seminars or group sessions.

CORE EXPERIENCES

To provide for individual professional growth, the core of experiences for continued study by the classroom teacher should include four elements:

1. An analytical study of teaching in different types of educational environments.
2. A study of human learning capacity based upon behavorial science concepts and research.
3. A study of the structures and use of knowledge with major emphasis on the formation of concepts basic to logical organization of instructional content.
4. An analytical approach to designing learning experiences to assist children in formation of concepts.

Analytical Study of Teaching--The team approach described earlier serves as the basic structure for designing and providing experiences in a study of teaching in different types of educational enrivonments. Several approaches can be utilized as a means for analysis of the variables associated with teaching. Research reports which may be used include:

1. Professor Ned A. Flander's research in interaction analysis employing ten categories for the classification of teacher and pupils talk.
2. Professor B. Othanel Smith's observations, descriptions and classifications of the logical nature of teaching behaviors.

3. Professor Hilda Taba's research on the teaching strategies and materials necessary for the development of thinking.

4. Professor Arno Bellack's analysis of the verbal interaction between teachers and pupils in terms of the various kinds of meanings communicated in the classroom.

5. Professor Charles Galloway's study of observational procedures for determining teacher non-verbal communication.

6. Professor J. W. Getzel's system for the analysis of the school and classroom group as a social system.

7. Professor John Withall's technique for study of the social emotional climate of the classroom.

Specific modular descriptions of human learning study for the in-service teacher are included in Section VII, Human Learning. Experiences in analysis of teaching through a study of the communication process are described in Section VII.

Experiences in analyzing environmental systems which influence the growth of the elementary pupil are outlined in Section VII in "Social Learning and Personality Development." This part emphasizes the relation of family structure and social structure to the classroom. Practical experience in community analysis is provided in the Advanced Experiences in the Foundations of Education section of Human Learning. University staff serve as resource persons for experiences in these areas.

Study of Human Learning Capacity--Continued development of modes of inquiry is a major objective of this area of study. J. P. Guilford and P. R. Merrifield's research on the structure of the intellect, Jerome Bruner's models for representing a body of knowledge, the work of Fred Tyler and of Harry Broudy, B. O. Smith and Joe Burnett in readiness, motivation, and individual differences, Richard Suchman's training program for the inquiry process, Asahel Woodruff's study of concept formation are but a few of the research efforts which can be utilized in this area.

Structures and Use of Knowledge--The teacher must have an understanding of the formation of concepts basic to the logical organization of instructional content. A systematic analysis of content and the logical operations performed in teaching serves as a basis for study in this area. In addition to the research efforts listed above, the research of Albert Hickey and John Newton in logical structures and B. Othanel Smith's study of logical aspects of teaching can be used in seminars as a basis for study in this area.

Design of Learning Experiences -- This area of study helps the teacher integrate concepts of the previous three areas as he designs instructional systems. The clinical experiences involved include proposing, implementing, and evaluating various designs. Preparation of objectives and selection of evaluative techniques are important aspects of this area. Benjamin Bloom's Taxonomy of Educational Objectives provides the basis for this study. Hilda Taba has presented a teaching strategy in Thinking in Elementary School Children which can also be used.

INDIVIDUAL EXPERIENCES

The individual experiences for each teacher are based upon diagnosed strengths and weaknesses that each brings to the Clinic-school Network. One example of an individualized experience might be a focus on content study in order to extend understandings in a selected discipline. Development of various disciplines with special attention to the modes of inquiry and conceptual sequence as it might evolve over the years would be part of this experience.

Changes are inherent in our present culture, and a built-in recycling procedure is necessary to revitalize continuously the teacher preparation program and to keep it up-to-date. The Network facilitates the return of teaching personnel to the university for a period to instruct undergraduates, serve as a member of curriculum committees, work in the instructional media center, work in reading clinic, focus on educational research, or participate in other activities according to his interests and background.

Professional Instructional Leader--A small proportion of teachers with a well developed clinical behavior style, leadership ability, and demonstrated success in teaching are selected for intensive training as instructional leaders. Such personnel become catalysts for further development and refinement of the clinical behavior style in teacher preparation. They are involved in deriving clinical materials while also fulfilling a professional role in the school. The focus of their role changes from primarily teaching children to primarily working with teachers. In the later capacity they continue to develop the clinical behavior style but the application is somewhat modified.

While each professional instructional leader preparation program would be individually tailored, it would include special seminars in research, educational technology, clinical practice, and educational strategies. Part of his time might be spent in writing curriculum materials, trying out and evaluating recent innovations, and studying in other clinic networks.

INFORMATION SERVICES

To provide further individualized services and experiences for the professional instructional leader and classroom teacher, an information dissemination system can be developed which would permit the comprehensive updating of each system participant. The system could identify 500 to 700 significant periodic publications relevant to the concerns of elementary education, and distribute to each participant (classroom teacher, consultant, etc.) a subset of articles appearing in the document population on a monthly or bi-monthly basis. The set of articles received by each participant would be determined by that participant's unique interest profile. In this fashion, each Network member would receive an automatic, comprehensive survey of new developments in his interest fields. This individualized exposure to new professional data would reduce the proliferation of traditional seminar and classroom commitments for Network personnel.

While the latter can be valuable integrative learning experiences, they are time consuming, expensive and often ineffective vehicles for information exchange.

An example of an information dissemination system which permits this comprehensive search and selective dissemination of large document populations is the Oakland University Knowlege and Information Dissemination System.

This dissemination system enables each user, at minimal time-energy cost, to identify all relevant current periodical literature in his defined professional interest areas. This continuing, comprehensive selective exposure to new knowledge in his field is supplemented by periodic user-seminars, in which resourced teachers, consultants, and university representatives explore developmental trends, formulate application strategies and generally synthesize new learnings.

Use of an Information dissemination system is outlined in Section X as one expression of an extremely adaptive and potent body of computer technology. Obviously, special interest groups, task-forces (curriculum committees, budget committee, etc.) and student classroom groups can be served by special information need profiles. Beyond this, the core software can be employed to generate new patterns of teacher-specialist-administrator interaction within the university-elementary school community. As an example, current professional problems can serve as system input. In a given multi-school university community, assume that two dozen widely dispersed professionals face the immediate problem of parent-school friction due to pupil relocation in special programs. Each professional inputs his problem, and the computer system returns to all a list of other professionals addressing the same issue, together with those resource agents with relevant skill. A system-wide, problem-oriented meeting can then quickly be scheduled for seeking solutions to the problem. Teacher administrator, specialist, counselor, and university representative would develop new systematic patterns of social interaction based on their commonality of concerns, not on location or chance meeting.

The pooling of resources, both human and technological, from the various educational agencies in the Clinic School Network should systematically improve the competancies of practicing teachers and thereby improve the education of children. For too long, education has assumed that systematic pre-service education plus separate graduation and in-service programs would provide adequate teacher training for teachers. Such a practice does not permit continuous growth nor does it adequately meet the needs of individuals in varying teaching situations.

Particularly, the development of different instructional competencies has been neglected. In addition to pre-intern, intern, and practicing teacher roles (with specialization at three pupil-age levels and eight curricular areas), the model includes training of paraprofessionals and professional instructional leaders. In the following two sections, illustrative roles and programs for the Associate Teacher and the Instructional Media Specialist are described to illustrate how those programs fit with that described in the main portion of the project.

THE EDUCATIONAL MEDIA SPECIALIST IN THE ELEMENTARY SCHOOL

This aspect of the program defines the role of an educational innovator and leader--the Educational Media Specialist in the elementary school. The job as described here in is unique in that the Educational Media Specialist is not primarily a librarian nor an audio-visual specialist. He is an instructional leader, and the emphasis of his job is curriculum development and instruction through the administration and operation of the elementary school Media Center. This is one of the Professional Instructional Roles envisioned as part of the elementary school staff.

The primary purpose of this section is twofold:

1. To define the job responsibilities of the Educational Media Specialist.
2. To outline the program of higher education necessary to prepare a person with teaching experience for this role.

Because both job responsibilities and preparation must be based entirely on the tasks to be performed in the school setting, the role will be developed through defining the interrelationship and dependence of the job of the Educational Media Specialist on:

A. The Educational Program in a Child-Centered School.

B. The Media Center and Curriculum Development in a Child-Centered School.

C. The Media Center and Instruction in a Child-Centered School.

Within each of these sections, the job responsibilities of the Educational Media Specialist as they relate to educational program, curriculum development, and instruction will be specified.

Further, the higher education training required to prepare the Educational Media Specialist in each of these areas will be described.

This section will not attempt to define every facet of the job to be done, but rather to highlight major role responsibilities. Further, the description of the training program essential to fulfilling this role is not a course description, but a definition of experiences that should be included in training to insure competence in the role. The last two sections are:

D. Qualifications for Entrance into the Training Program for the Educational Media Specialist.

E. A Projection to the Future: Computer Assisted Instruction and the Media Center.

The work to be done by the Educational Media Specialist is pioneering, demanding, and multi-faceted because it is dependent on the program of the elementary school. This program is inextricably interwoven with needs of the individual learner, the demands of society, and the unique potentiality of each staff member in the school.

THE EDUCATIONAL PROGRAM IN A CHILD CENTERED SCHOOL

The program of the school must not only take into account the children who are served by it, but must in effect be based on the characteristics and needs of these children.

Each child is unique. He has needs, abilities, and interests individual to himself. His response of learning and the school environment will be based on his uniqueness, his special interests, and his own socio-economic environment and background. Educators recognize that children learn differently. Readiness for learning and rate of learning varies from child to child. Research in learning shows that individuals have unique cognitive styles that affect their way of learning, and that these styles may be established by the time the child enters school. These differences should be cherished and nurtured in a democratic society. At the same time, society places demands on the learner for competence and knowledge in a technological age.

Educators are bound to grapple therefore with this dilema:

1. How to meet the needs of the individual learner?

2. How to meet the demands of society on the learner?

Educators can synthesize in a meaningful learning environment all of these inputs on the individual learner: the need to develop a positive self image; the need to learn, explore, put knowledge into use; the need to develop a cognitive style of inquiry, thinking and learning that will allow each child to come to grips with the knowledge explosion; and the demands of society for a knowledgeable citizenry in a democracy.

In order to make this synthesis, the permeating philosophy of the school program must be one of individualized instruction. The philosophy of individualized instruction can be realized in a school setting where the staff uses its individual strengths to meet the needs of individual learners. The staff must diagnose each child's learning ability and interest, his social capacity and need, and his skill for personal interaction and then place him in the group and with the teacher who can best aid his development as an individual.

Instructional goals will be determined by the staff. Within this instructional framework, precisely stated pupil behavioral objectives will be defined for units of instruction. Instructional sequences are then determined along with a stipulation of materials to be used in order to implement the behavioral objectives. Diagnostic tools to determine pupil entry level into the instructional sequence must be available along with evaluation instruments to measure pupil learning.

With such an instructional program, individualization of instruction can be facilitated. However, this is a framework for learning only. Knowledge of each child's uniqueness, individual attention and understanding, staff communication and awareness of each learner, staff knowledge of the instructional program and materials are crucial to insure that each child has the learning environment he needs at the critical moment of readiness when learning takes place.

Schools with a program of individualized instruction must be staffed by teachers who have the qualities which Arthur Combs has described as the characteristics of a good practitioner in a helping profession:

1. He is sensitive to how children feel.
2. He is sensitive to how another individual sees himself.
3. He knows the strengths of his colleagues and encourages and reinforces them.
4. He believes his colleagues are able.
5. He believes in the integrity of the youngster and that he can make decisions and value judgments for himself.
6. He believes in himself, likes himself, and sees himself as likeable.
7. He accepts his associates and shares himself with them.
8. He is open and self-revealing.
9. He believes that schools are for youngsters and dedicates himself to helping each child realize the best that is within him.
10. He uses himsélf well and has chosen a method of instruction with which he can feel comfortable and effective.
11. He accepts youngsters as they are so that he can help them become.

Such a staff which in itself is made up of individuals with unique characteristics and abilities works with each child to help him grow and become the best he can be. The Educational Media Specialist is a member of this staff. In fact, he works with the staff in developing instructional goals and in implementing the philosphy of individualized instruction.

It should be noted that the principal in such a school is an integral part of the staff. He is responsible for instruction in his building and works with his staff on program development and in developing and utilizing their individual strengths in insuring that the program function well for children. The Educational Media Specialist works closely with the principal as a support person in this program development and implementation. The principal and the staff together create a school atmosphere of warmth and acceptance that encourages exploration, inquiry, and discovery on the part of individual learners. The learning setting must be so flexible as to allow:

1. For impulses to inquire and find out.
2. For as many patterns of learning as there are individual pupils.
3. For immediate and accepting attention from adults that are significant to the learner and who accept and encourage questioning and change.

The facilities of this school must provide for this flexible learning environment, for independent study; for large and small group instruction; for multi-age grouping; for student team learning; for exploration with printed, non-printed, manipulable, and creative materials; for body movement and creative expression; for contact with children of many ages and of like and unlike talents; for contact with significant adults; for display of talents and accomplishments; for exploration of other cultures and differences in people; social, racial, religious, avocational, vocational, and educational.

THE MEDIA CENTER AND CURRICULUM DEVELOPMENT IN A CHILD CENTERED SCHOOL

A Media Center must be the heart of such a school--not necessarily physically so, but certainly in terms of learning, exploration, and setting the tone for significant experimentation and flexibility to insure that individualized instruction is realized. The program of the Media Center emphasizes learning and discovery:

1. Learning in that a child has materials, spaces, and equipment he needs at any time to pursue an instructional sequence.

2. Discovery in that the Center is open for inquiry, browsing, wonder and exploration in the world of knowledge and creative expression.

This building core is an extension of the classroom, and the classroom is an extension of the Media Center. This statement perhaps best reflects the philosophy of the Media Center in setting a tone for learning. Not only is the center a source of materials and a pupil learning and discovery center, but it is a resource center for teachers. The staff works and plans here as a group or as individuals. The Educational Media Specialist meets with them and provides the spaces and materials they need for instruction and curriculum development. His job is to make a bridge between instructional objectives and the learner and to facilitate a meaningful relationship between pupil instructional sequence, and materials.

It is for this reason that the foremost role of the Educational Media Specialist is in curriculum development and implementation. This role requires continual work with teachers and pupils in the educational program of the school. He must know and accept the school's philosophy of individualized instruction, its instructional goals, and implement these through the services of the Media Center. It should be kept in mind that his relationship to the staff is one of teacher to teacher. He is responsible to the building principal in implementing the school program through the services of the Media Center. His job responsibilities in curriculum development therefore call for him to be a service person to the staff through:

a. Provision of materials and equipment which provide for the individualization of instruction by implementing the instructional goals of the school and the behavioral objectives based on these goals.

b. Initiation of the use of materials and equipment by teachers and pupils based on their needs and interests.

c. Innovation in conjunction with the principal and staff of curriculum development and change using materials to initiate and implement this.

These job responsibilities in curriculum development and the training program necessary for him to carry them out are specified in the following pages. Both the job responsibilities and training in curriculum development are desdribed in these categories:

A. Involvement with Staff in Curriculum Planning.

B. In-Service Education of Staff in Curriculum Planning.

C. Use of Systems Approach and Management Tools in Curriculum Planning.

JOB RESPONSIBILITIES - CURRICULUM DEVELOPMENT

Involvement with Staff in Curriculum Planning

1. He will work with the school principal and staff on projects of curriculum development by serving on study groups, committees, and by working with individuals.

2. He will initiate curriculum change by introducing new programs to the staff.

3. He will encourage teachers to become involved in curriculum development and will encourage experimentation in curriculum through sharing ideas, discussion, and by providing pertinent materials.

In-Service Education of Staff in Curriculum Planning

1. He will initiate curriculum change by introducing new materials and equipment to staff and students and will conduct workshops and individual sessions to show how these can be used:
   a. in facilitating the instructional goals of the school
   b. in implementing behavioral objectives
   c. in individualizing instruction

2. He will know and keep knowledgeable of curriculum developments in elementary school education across the nation and will inform the staff of these.

Use of Systems Approach and Management Tools in Curriculum Planning

1. He will utilize these curriculum management tools in work on curriculum development:
   a. stipulate behavioral objectives
   b. outline the instructional program
   c. develop diagnostic tools for entry into the program
   e. develop evaluation instruments in order to define the effectiveness of program in attaining the specified behavioral objective.

2. He will know how to use such tools as the Program Evaluation and Review Technique (PERT) in order to insure that all aspects of a curriculum development project are accounted for such as:
   a. time
   b. cost
   c. personnel
   d. material.

The Management-Planning Subsystem serves as a resource for this process.

TRAINING - CURRICULUM DEVELOPMENT

Past experience in teaching can be used as a springboard to training in curriculum development.

Involvement with Staff in Curriculum Planning

1. He must have a laboratory experience that will give him an opportunity to work with youngsters and teachers in developing a curriculum program or in implementing one.

    a. This experience is crucial. The training program discussed here would be quite sterile without it. It is relatively simple to learn how to plan and control the development of a curriculum project, but working in terms of a specified group of youngsters and staff on a program for them is exacting and demands flexibility, ability to work with people, and openness to ideas and suggestions. Children and staff input ideas, personal preferences, learning style, teaching method, needs, interests, and individual strengths to any program under development or in use. These inputs personalize a program and cause it to become meaningful to learner and teacher alike. A part of the Educational Media Specialist training is to help him recognize and learn to utilize these essentials in program planning.

    b. He must learn earlythatcurriculum is a personal thing; teacher to class, teacher to pupil, youngster to knowledge and is contingent on individual needs and abilities and interests. Teachers have to be involved in curriculum development if they are to use curriculum as more than a course outline and relate it meaningfully to youngster's lives.

2. The lab experience in curriculum is an internship in curriculum development. It should provide opportunities for exchange of ideas and for work sessions with leaders in the field. Visits to groups like the Association for

Supervision and Curriculum Development Board of Directors or an Administrative Council Meeting in a school system when they are grappling with a knotty curriculum problem would be stimulating and open wider vistas of concern in curriculum change and implementation for the Educational Media Specialist.

In-Service Education of Staff in Curriculum Planning

His training in curriculum development should acquaint him with the means of learning about curriculum development across the nation, and how to communicate this to the staff he will work with in planning programs.

1. Trainees can begin to become familiar with significant curriculum projects around the nation by doing research in an area of particular interest to them and using the steps outlined in "Use of Systems Approach," above, as guidelines to learning about the project. In this way, he also becomes familiar with the professional literature.

2. The trainee should visit and correspond with (perhaps via recording or video tape) educators involved in the development of a new project.

3. The trainee should become acquainated with the work of Educational Research and Development Laboratories such as MOREL and ERIC as sources of research and development information in education.

4. Students will have an opportunity to see materials as tools to implement curriculum development, and should also begin to see that materials may be used to initiate curriculum change by stimulating teachers to ask: What is the purpose of it? How could I use it to meet the needs of youngsters I work with?

Use of Systems Approach and Management Tools in Curriculum Planning

1. Trainees in the Educational Media Specialist program should be given the opportunity to look at a curriculum project that they are interested in and be asked to answer these questions about it:
   a. Were student behavioral objectives carefully defined?
   b. What is the instructional sequence of the program?
   c. What materials and activities were used to implement the program?
   d. What diagnostic tools were used to determine entry into the program?
   e. What evaluation instrument was developed to determine student performance on behavioral objectives?
   (see Job Responsibilities)

2. Trainees have a laboratory experience in which they work on developing a program and apply curriculum management tools (such as PERT) to assure that consideration has been given to all the essential phases of program development: behavioral objectives, student entry level, instructional sequence, evaluation, etc.

3. Students study Mager's Preparing Instructional Objective. They also view Susan Markle's film Programming is a Process.

It cannot be emphasized too much that the philosophy of individualized instruction, understanding of child growth and development, and recognition of staff potential are the building blocks of any program of curriculum planning. Management tools are simply that--management tools--they can be used as guides, reminders, question stimulators, direction givers; but they cannot dictate the curriculum. Neither can the Educational Media Specialist; he works with staff and youngsters in developing curriculum and uses the tools he has learned as facilitators, not as prescribers or as infallible rules that must be adhered to rigidly.

Next to curriculum development, the primary responsibility of the Educational Media Specialist is instruction in and through the operation of the Media Center. In order to define his job responsibilities in terms of instruction and the training that would prepare him to carry out these responsibilities, it is essential to first describe the instructional program of the Media Center in implementing the philosophy of individualized instruction.

THE MEDIA CENTER AND INSTRUCTION IN A CHILD CENTERED SCHOOL -- A PROGRAM FOR LEARNING AND DISCOVERY THROUGH THE MEDIA CENTER

The following portion is divided into two sections which define the relationship of the Media Center and the Educational Media Specialist to the instruction in the elementary school:

A. The Learning and Discovery Program of the Media Center

   1. Learning and Discovery through Printed Materials
   2. Learning and Discovery through Visual Materials
   3. Learning and Discovery through Listening
   4. Learning and Discovery through Creative Expression
   5. Learning and Discovery through Other Cultures
   6. Learning and Discovery through Instructional Television
   7. Learning and Discovery through Independent Study
   8. Learning and Discovery through use of Equipment

B. The Educational Media Specialist: His Job Responsibilities and His Training Program for Implementation of the Learning and Discovery Program

   1. Learning and Instruction

2. Administration (including organization and budget)

3. Media Skills
    a. Children's Literature
    b. Printed Materials
    c. Audio-Visual Materials
    d. Instructional Television
    e. Equipment

It must be noted that this description of job responsibilities highlights major aspects of the role as they relate to instruction but does not attempt to state every fault of the job. Training is not specified in a definitive course outline, but in terms of kinds of experiences and knowledge needed in the training program to insure competency in the role.

THE LEARNING AND DISCOVERY PROGRAM OF THE MEDIA CENTER

As has been stated, the program of the Media Center emphasizes learning and discovery:

1. Learning in that a child has materials, space, and equipment he needs at any time to pursue an instructional sequence.

2. Discovery in that the Center is open for inquiry, browsing, wonder and exploration in the world of knowledge and creative expression.

The learning and discovery program of the Center is described within these categories in the following pages:

1. In terms of student learning and discovery activities as related to the instructional goals of the school.

2. In terms of the materials and equipment necessary to carry out these activities.

3. In terms of the spaces necessary to conduct these activities and to utilize materials and equipment.

Although these categories are treated separately in this description, they should be considered inter-dependent parts of the total instructional program of the Media Center. The Educational Media Specialist will implement instruction throughthis program of the Media Center.

Learning and Discovery Through Visual Materials

Printed Materials including books must be available for all age groups, reading levels, and interests in order to implement instructional sequences related to subject matter in the school program to acquaint children with the wonders of children's literature is primary to the purposes of the Media Center. Perhaps nothing is more readily designed to provide enjoyment and wonder for the individual learner than our heritage of children's literature. Something is there for every child to stimulate inquiry, cause to wonder, give adventure, suggest solutions to problems, provide opportunities to be and relate to heros, and help develop understandings of oneself and others.

The purpose of the program in children's literature is to encourage and stimulate two essentials of life in a mechanized age: joy of reading and conversation. Both of these are skills that must be learned and nourished, and both are crucial to satisfying, leisure time relationships with others. The youngster needs to be encouraged to express ideas and share them, and to expand on them with people significant to him. This develops a sense of self-worth through learning and sharing with others, and so it enhances self knowledge. It also stimulates reading and learning for their own sake which is both rewarding in leisure time and crucial to an informed citizenry.

Space for this program should be considered carefully. It should be a carpeted, comfortably furnished area containing fiction, picture books, and magazines. A variety of furniture sizes should be included - in warm and inviting colors. Small coffee-type tables, corners, and conversation groupings might be considered. This area might have space to display famous paintings - both modern and antique - and these should be tastefully framed, changed often, and carefully selected to stimulate interest, inquiry, discussion, and reading. Music might be piped in also. Though fire regulations may discourage it, consideration might be given to having a fireplace with comfortably arranged furniture near it as well as floor space for sitting on the carpet in front of it to enhance an area for reading and conversation in the Media Center. Pupils and teachers should have free and ready access to this area for browsing, conversation, quiet reading by oneself. Pupil to pupil and staff to pupil conversation should be encouraged here for discussion about books, people, ideas, and individual interests.

As a part of the Media Center's program on children's literature the Center might also have a carpeted story telling area, perhaps a recessed amphitheater, where children could gather around and listen to readings of stories, folk tales, and poetry. This area could have controlled lighting so that it could be darkened for effect, or so that a spotlight could pinpoint the story teller or a book or realia used for illustration. Nearby should be space for projecting pictures, for writing, or for flannelboard figures. Also there should be display boards, perhaps on a rotating rod, to display pictures, paintings, realia, and student illustrations of stories. A stereo phonograph and tape recorder should be readily available for listening and sound effects. A flat, stage-like area, at one side of the amphiteater would give youngsters a chance to act out, sing about, or dance about a story.

Such an area would promote the Media Center's program of learning and discovery through providing trappings necessary to set a mood or create an atmosphere to stimulate interest in literature and reading. This area would be used by all teachers to encourage reading, a continued interest in and love of books, and expression of creative feeling through body movement and vocal expression.

Learning and Discovery Through Visual Materials

Some children learn better from visuals than from the printed page. Children come to the Media Center motivated to learn. The learning environment of the center, therefore, should include the kind of stimuli a child will want to interact with and absorb in terms of learning program. Visuals provide such stimuli.

The program of the Media Center, therefore, includes the time, space, and materials so that a child who learns best from visuals is recognized and a program is prescribed for him. Instructional sequences using a variety of visual materials can be organized and packaged for the child to follow in a subject area that is best presented visually.

Such visual presentations of materials might include films, filmstrips, filmloops, transparencies and other materials which can be organized in a variety of presentation formats for individualized instruction. The collection of these visual materials should be extensive enough to cover all learning areas at different levels and difficulty of presentation. Included should be materials to stimulate interest and inquiry: literature, stories, unusual facts, hobbies, and collections. Because a Media Center should be a discovery as well as learning center, pupils should be free to browse among these materials for the joy of learning about something of particular interest or to satisfy curiosity. Previewers and preview rooms should be readily available so that pupils , teachers, and groups can sit down and look at a filmstrip, 16mm film, or 8 mm filmloop. Youngsters should also be able to check these materials, previewers, and projectors out to take home or to the classroom as readily as they would a book.

The storage of these materials should be readily accessible to pupils. It should also allow for displays to introduce new materials, show what is available, and encourage use.

Learning and Discovery Through Listening

Children learn through listening. This is a skill to be acquired and carefully cultivated in children. The Media Center's program provides opportunities for learning and discovery through listening by providing records, tapes, and other audio materials.

Once again, the collection should be extensive and include materials at a variety of levels of difficulty and learning readiness. For example, spelling and reading lessons paced to the individual learner's ability level could be included for a pupil to take as prescribed by his teacher. However, interest and hobby areas as well as subject matter should be covered. Records of stories, of poets reading their own work, of famous men, of historic events, of folk songs, and of classical and popular music should be available for pupils and teachers. Whenever possible, visuals should be included with the recordings.

Listening areas should be set up for the individual or group. A listening post near the collection would encourage an individual or a small group to listen and listening rooms can accommodate larger groups also.

Again these materials should be as accessible as books. They should be stored for easy discovery and be attractively displayed. Pupils should be encouraged to check them out for home or classroom use.

Learning and Discovery Through Creative Expression

A program of individualized instruction provides opportunities for the child to develop any special abilities and talents he has in art or other forms of creative expression. He may be encouraged to create materials to illustrate what he has learned and discovered in the instructional program of the school. An important part of the Media Center's program is providing and displaying art forms: sculpture and painting reproductions both ancient and modern.

These should be stored or at least rotated on a display rack that can be readily moved or leafed through by the student. These paintings could be utilized in classrooms and in displays to illustrate what is being taught and to complement other materials being used. A teacher might teach human history, expression, and ideas through displays of paintings that illustrate these; i.e., a sequential display of a nation's history through art. They can be used to encourage discussion of these things, and in conjunction with music and literature, to explore the culture of other peoples.

Pupils should be encouraged to take paintings to the classroom, to look at them in terms of and for information about their studies and to use them to illustrate their classroom reports of what they have learned.

Or course, youngsters must also take these paintings home--they may want to share them with the whole family or hang them for a while in their own room, and they must be encouraged to do so. Both at home and school, children would have the opportunity to live with and to become familiar with art, to be stimulated by it, and to sense beauty and the power of creative expression. Further the children's art work should be continually on display in the Media Center. Some of it should be included in subject matter displays that reflect a variety of material on a given area.

Creativity takes many forms other than art. Storytelling has already been mentioned. Creative dramatics is also encouraged through the Center's program. Dramatics can be used to reflect learning, the expression of literature, and a child's own desire for creative expression.

The Media Center provides puppets, marionettes, and plays for children to use. It cannot be overlooked that art work, storytelling, and creative dramatics are means of learning within the disciplines. Folk legends and plays express the culture of other peoples. Puppets and marionettes from other lands give children a chance to look at and understand another people's way of life in terms of human qualities and not just geography or exports.

Learning and Discovery Through Other Cultures

When students, staff, and residents of the school community travel at home or abroad, the school should allot them a sum of money to buy realia: household items, toys, dolls in native dress, regional or cultural specialties, native costumes, books, or other unusual items to stimulate interest and to provide more information about a people and their culture, a country, or a region.

Every attempt should be made to buy costumes that would fit children so that they can try them on, and perhaps act out a play or role to reflect another land or people.

Displays should utilize relia of this kind and include in the display other materials such as filmstrips, books, and records. The realia can be used then to stimulate further inquiry and search into other types of material.

Learning and Discovery Through Instructional Television

Instructional Television provides a rich resource to the instructional program of the school. Classrooms should be equipped with TV receivers and part of curriculum planning should include utilization of educational television.

The Media Center's program includes providing information about instructional television programs as well as materials to support and complement its instruction. The Media Center also should have some TV receivers available for individual pupil or group use. Headsets could be provided so that these receivers could be utilized within the total program of the Center.

The Media Center would also obtain some video tapes of programs not available during the school day for use in the instructional program. The Center would also store video tapes made by teachers and classes for future use in the school program.

The Media Center should have a portable video tape recorder available for classroom and school use. Visitors, assemblies, and programs could be recorded for future reference. The equipment could be used by pupils and teachers to record individual class projects and to evaluate themselves and their work.

The video tape recorder should be available for an individual teacher or group of teachers to use to evaluate their own teaching or the work of a pupil group. Evaluations may be private and erased, they may be of groups working as a team on a specific curriculum project, or for an individual learner.

Besides a portable TV, the school should have a light weight battery pack video tape recorder for out-of-school programs, field trips, or sports events. Such programs can then be viewed at leisure and discussed at length in the classroom to enhance learning or to reinforce a learning experience.

Finally, a TV Work Room adjacent to or within the Media Center should have a large console video tape recorder powerful enough to drive twenty-five video receivers so that a TV program, a visitor's discussion, a school program, or a field trip may be played back to a number of pupils at the same time.

This only assays the multitude of materials that should be available through a Media Center to facilitate a program of individualized instruction. Accessibility of material is crucial to learning, discovery, exploration, and inquiry which lead to self-knowledge, understanding, and competency. Attention must be given to all kinds of material not mentioned specifically here, such as: educational games and simulation techniques, packages of materials, and new technology.

A major responsibility of the Media Center is to emphasize this philosophy through the materials it attains and through its displays. Displays should exhibit a variety of materials about a given subject to say in effect: youngsters learn differently, at different rates, at different levels of understanding. Therefore, at any age and in any grouping, a variety of materials and presentation modes are needed to insure that each individual learner's needs are met. If knowledge is to be assimilated, it must be at a child's level of learning and his own readiness so that he will want to learn.

Learning and Discovery Through Independent Study

A part of the Media Center's program is instruction in and encouragement of independent study in all these discovery and learning activities. Equipment for use in independent study is essential. Wet and dry study carrels should be provided so that a pupil can study alone. Carrels and chairs should be in varied sizes or should be readily adjustable to pupil size. Wet carrels might be equipped with a cartridge tape recorder or play back unit so that a pupil can listen to a lesson. They should have a filmstrip previewer and a 8mm projector readily available. Other wet carrels could house readers and tachistoscopes to pace pupils through reading programs and to help them develop reading skills. Language masters or a combination of equipment may be necessary in a carrel for use in some programs of instruction for an individual child. Dry carrels should also be available for the pupil who wants to write, read, or do some other activity not requiring equipment. Children should be free to go to a carrel at any time to read, to browse through a cartridge or filmstrip, to independently pace themselves through a program or for quiet reading or research. Carrels should be attractively and comfortably made to invite pupils use and equipment should be readily operable (cartridges whenever possible) so that any age child could use carrel facilities on his own.

Learning and Discovery Through Use of Equipment

In order that materials can be effectively used for individualization of instruction, the Media Center must have a continually available supply of equipment on hand for pupil and staff use in the Center, in the classroom, and at home. Just as a philosophy of pupil use of materials must pervade the Center, so must this philosophy pervade use of equipment. The teacher and child must have the right material ready for use with a group or an individual at the critical moment of readiness for learning, and the right equipment necessary for the material to be operable.

Equipment must include: 16mm projectors, 8mm cartridge and reel projectors, filmstrip projectors and previewers, filmstrip-record combinations, tape recorders both reel and cartridge, language masters, record players, microscopes and microprojectors, slide projectors and viewers, and overhead projectors. Portability should be considered so that a child could move equipment to a carrel, a class, or home easily.

Also included in the Media Center should be a comfortable grouping of furniture where a pupil or small group could view a TV program or 16mm film with headsets.

Thirty-five millemeter and 88mm cameras should be available to the staff to make slides, filmstrips or 8mm movies for class work, for presentations, for individual programs.

Just as it is hoped teachers would produce materials for their classes or for pupil use, children also should have access to cameras and be encouraged to produce films for leisure activities or for reports on learning progress.

Work Spaces and Production Equipment

Spaces and equipment should be provided for staff and pupils to produce materials in the Media Center. The work space should have a large counter space with a sink. Among necessary equipment is a laminator, an electrostatic copier that will reproduce the original and make masters and transparencies.

The work space should include typewriters, some with primary type. A small dark room facility should be adjacent to this area. This would be for Media Center staff use and some children might be trained to use the facility and/or use it for pupil instruction or avocational interests.

JOB RESPONSIBILITIES AND TRAINING PROGRAM FOR IMPLEMENTING THE LEARNING AND DISCOVERY PROGRAM

The preceding pages described the instructional program of the Media Center. In order for this to function, the Educational Media Specialist must carry out job responsibilities in each of these categories:

A. Instruction

B. Administration (including organization and budget)

C. Media Skills (including children's literature, and audio-visual)

If a priority were to be given these categories, it would be as they are listed. However, it must be re-emphasized that these responsibilities are one job and all are essential to the function of the Center and the position of Media Specialist. Each is necessary to the whole and at any given moment one would have pre-emenience over the others only in that it would be being utilized at that moment.

The reader might keep in mind that this is not a traditional approach to the role of the Educational Media Specialist in an elementary school.[1] The break has already been made in terms of curriculum development. It is further emphasized in the definition of responsibilities in instruction as related to individualization of instruction.

INSTRUCTION

The following pages state the Educational Media Specialist's job responsibilities in each of these categories and suggest training programs to prepare him to perform these duties. It should be noted that as in the case with children, each trainee in this program will have different abilities, competencies, and skills. These should be diagnosed so that his program emphasizes and reinforces his strengths as well as helps develop skills he does not possess on entering the program. In other words, this training program should be tailored for the individual and should therefore, exemplify the philosophy of individualized instruction.

Job Responsibilities - Instruction

1. He uses his knowledge of child growth and development in planning learning and discovery activities and experiences that take into account the growth patterns of various age levels, the need for creative expression both verbally and through body movement, and the social

---

[1] The role as traditionally defined in terms of librarian and audio-visual specialist is not emphasized. It is understood that this moves counter to a trend in education to train specialist of these areas in the face of the reality of the overwhelming amount of material, technology and equipment the person in this role must deal with. This paper's position chooses an equally forceful trend in education for the future--that which emphasizes individualized instruction. Because of this the Educational Media Specialist's role in curriculum development and instruction through the Media Center program is critical.

7

exploration and development of each age group.

2. Piaget and Taba indicate that cognitive development or the child's manner of learning, assimilating, organizing, and utilizing information is initiated in his formative years, while unique learning styles, or cognitive style, may well be established when a child enters school. Therefore the Media Specialist uses his knowledge of learning theory and of individual learning styles to prescribe materials and instructional activities that take into account learning readiness and cognitive development.

3. He implements the philosophy of individualized instruction by utilizing knowledge of the learner, his interests, abilities, and readiness in order to provide the materials and learning environment each individual needs to grow to his potential.

4. He applies his knowledge of child growth and development, learning theory, and individualized instruction in working with teachers and curriculum study groups to develop instructional sequences that utilize this knowledge.

5. He works with staff on the attitudes of children toward themselves and others and provides materials to help them explore these feelings and relationships.

Training-Instruction

1. Because of having had teaching experience, discussion of child growth and development would be relevant for students in the Educational Media Specialist program. The discussion should focus on the growth patterns of children, but should emphasize individual development, the need for movement and freedom of body expression, the need for stimulation and satisfaction of intellectual curiosity, the need for acceptance and understanding, and how each child varies in relation to each of these things.

Self concept development should be emphasized. The work of Arthur Combs and Carl Rogers might be used. Use also could be made of the work of Fritz Redl to discuss child growth and development because of his understanding of what is normal for a child, and his ability to relate this to teacher experience and to give clues to constructively dealing with the same.

Though he has made a greater contribution to understanding the adolescent child, Edgar Friedenberg would stimulate and challenge the too often accepted philosophy that children should all have the same educational program. He emphasizes unconventional patterns for developing a child's individuality.

2. Learning theory should be introduced, perhaps in terms of the definitive work of Piaget and Taba in high-lighting the cognitive development of the child. Some work has been done on differing cognitive styles between teacher and pupils and the impact of this on the learning environment. Consideration might be given to the work of Joseph E. Hill of Oakland Community College to quickly heighten understanding of the impact of different cognitive styles, especially when those of teacher and student conflict.

   As an understanding of cognitive style develops, the students might also look at the work of Max Jerman of the Institute of Mathematical Studies in the Social Sciences at Stanford University. He has interviewed youngsters and identified distinct mental operations that children use in solving problems. Jerman is attempting to program the computer to recognize a child's individual pattern of finding solutions and to respond by giving him drill and practice suited to his individual learning patterns.

The learning styles and modes of analysis of the various phases of the behavioral sciences must be an integral part of the Media Specialist training program. He must be as highly skilled in analyzing human behavior as other professional instructional personnel, and in addition understand media well enough to translate theory into practice.

The Media Specialist student in light of this should examine his own cognitive style, recognize it, and accepting this understand that children's will differ and that he may have to work with each child accordingly.

3. In developing an understanding of individualized instruction, John Goodlad's work should be studied both through his written and visual materials.

   Visitations to a number of E.S.E.A. Title III projects on individualizing instruction in the state or region would deepen understanding. Staffs from such projects can discuss their projects, problems they have faced, successes in individualizing instruction and applications of this philosophy with the trainees.

   Several films are available which should be used initially as preparation for visitations or visitors. A film on the Oakleaf Project in Pittsburg might be an excellent introduction.

4. The trainee should have access to a lab situation where he would work with a group of pupils on a specified instructional objective. He would individualize instruction by recognizing the needs of each youngster in terms of his age and developmental patterns; determining the individual learning interest of each child by discovering his cognitive style; and by planning activities and finding materials that would relate to each child's interests, abilities, and implement instructional objectives. It might be found, for example, the one child would learn

best from a printed page, another through a filmstrip, or another through discussion.

Another lab experience would involve working with disadvantaged youngsters. The learning needs of these youngsters are overwhelming; they do not fall into a package program; they cannot be conveniently taught as a mass; and their cognitive style is likely to be quite different from that of the Media Specialist trainee. This lab experience would give him a keen awareness of the need for individualized instruction, of the impingement of human needs on learning, and of the variety of instructional techniques and materials that are necessary to helping an individual child grow.

5. Emphasis must also be placed on the effective development of the child. This is as individual as cognitive growth and the trainee should have the opportunity to examine the child's attitudinal growth and to provide Media Center programs and materials so that the child develops acceptance and understanding of himself so he can better accept and relate to others. He must be given opportunities to explore his own emotions and feelings with adults and peers significant to him. A crucial part of the program is discussion of attitudes and values toward self and others and an exploration of the means of interacting and relating to others in a variety of situations.

ADMINISTRATION

The responsibility for administering and organizing the Media Center so that it supports the program of the school is of primary importance in the role of the Educational Media Specialist.

Job Responsibilities - Administration

1. He will be responsible for the smooth operation of the instructional program of the Media Center.

2. He will work with the building administrator to insure that the total program of the school is served by the Media Center.

3. He will work with the staff on utilization of the Center by individuals and groups of pupils.

4. He will know the community served by the school and with the staff will work to provide a program that encompasses community concern and change.

5. He will work with central administration and/or the central media coordinator to:

    a. communicate the progress of his program,

    b. coordinate his program with the central media program,

    c. insure use of any central materials supply in his school building.

6. He will administer his budget, taking into account the purchase of new materials, replacement, repair, expendable items costs, and contingency funds. He will keep a petty cash account for incidental and immediate purchases.

7. He will be responsible for the organization of the materials in his Media Center so that they are readily located and retrieved. He should take into account information retrieval systems to implement this.

8. He will supervise the activities of any professional, clerical, or para-professional personnel responsible to him.

Training - Administration

He will have a seminar which will give him an opportunity to explore school administration, finance, and operation. The seminar would provide the following experiences:

1. The trainee will be introduced to the principles of administration.

2. He will be introduced to the community school concept.

3. He will be introduced to school system organization and understand the importance of communication within the line and staff designations of a school system. He will learn the limitations of his job responsibilities as they relate to other school system positions.

4. He will learn the principles of supervision and evaluation.

5. He will learn the possibilities of Media Center organization for ready information retrievel. For instance, he might be introduced to such methods of organization as color coding.

6. The seminar should provide opportunities to practice principles of administration, supervision, and evaluation. The seminar should be conducted on the basis of simulation: the trainees would simulate a real Media Center, the problems of administration, supervision, and evaluation. They would simulate the development and expenditure of a budget. Further, they would be given problems of organization and retrieval of information and materials. This seminar would also give them opportunities in a simulated situation to practice teaching the organization of the Center to teachers and pupils.

Media Skills

It has already been stated that this position is not defined in terms of the traditional role of the librarian or AV person. Training for the position, therefore, does not emphasize gaining specialization in either of these fields. However, these inputs on the training program should be kept in mind:

1. The background of the individual trainee. If he has had some training in either library, or AV, more emphasis may be placed on the other areas in the individual trainee's program.

2. The support staff. The depth of the training he will have in these areas is somewhat dependent on his support staff:

    a. If he has professional library or AV people on his staff, his training should place greater emphasis on curriculum, instruction, administration and organization of the Center. He should know enough about the library and AV fields, however, to supervise the work of his professional staff.

    b. If he has auxillary or associate instructor help on his staff, his background in AV and library must be sufficient to supervise and direct their activities in cataloging, shelving, and circulating materials; and in the use, maintenance, and repair of equipment.

    c. If he has no support staff, his training and job responsibilities would require more involvement with the selection, cataloging, and circulation of materials and the instruction in use of equipment and materials.

However, it must be emphasized that we are training a professional person. His skills and time must be used in curriculum and instruction in the school of the future. With control processing and or the opportunity to purchase cataloging, professional time should not be spent in this function. Nor should it be spent on maintenance and repair of equipment. This must be handled by out-of-school system or in-the-system repair service. Therefore, this paper will not discuss training either a library or audio-visual specialist, but rather a generalist in these areas who knows how to organize materials, develop procedures for selection, utilize materials and equipment with children and teachers, and instruct in the use of the same.

3. In terms of selection of materials, the staff will give support to the Educational Media Specialist in selecting materials to implement the school program. The Media Specialist will work with the staff in establishing selection procedures and in securing materials necessary to insure the continued functioning of the school program.

4. Finally, much must be learned on the job. This is a challenging, continually changing position. It must adapt to school personnel, pupil inputs, and curriculum change. There is a constant need, then, for professional growth and improvement. So much of the trainee's responsibilities are dependent on the school program itself that the training program will best serve him if it prepares him in curriculum, instruction, child growth and development, group dynamics, and in becoming flexible and able to meet the contingencies of change.

As has beenindicated earlier in this paper, media skills, job responsibilities and training will be discussed in these areas:

1. Children's Literature

2. Printed Materials
3. Audio-Visual Materials
4. Equipment and Production
5. Instructional Television

It should be noted that these are all aspects of one role and as such are inter-dependent in implementing the program of the Media Center.

Job Responsibilities-Children's Literature

1. He will know children's literature in terms of appreciation and enjoyment so that he can share this with teachers and learners.
2. He will develop a program of children's literature for the elementary school that will introduce a variety of reading materials to every youngster when he is ready for progressively more difficult and stimulating materials.
3. He will initiate book conversations, reading groups, and story-telling, teacher to pupil, and pupil to pupil.
4. He will conduct in-service workshops for teachers on children's literature, storytelling, and illustrators of children's books.
5. He will recognize a child's particular reading interest and help prescribe an individual reading program for him with his teacher.

Training-Children's Literature

1. The important thing in learning about children's literature is not to have read every book, but to know what children respond to and how they respond through coming to enjoy children's literature oneself. This

enjoyment and knowledge is not gained through inundation in a survey course in children's literature. Rather, it is developed through experiencing and talking about children's books with people who cherish, love, and create them.

A year long seminar should be offered that would provide opportunities for conversations with children's authors, illustrators, and others interested in the field. Films such as the Lively Art of Picture Books should be shown. Opportunities to discuss children's literature and the development of an elementary program to introduce children to it should be provided.

3. Not having a survey course does not preclude some systematic development of a program for the elementary school youngster. In all one would hope for the development of an appreciation of children's literature that would lead the trainee to say with the great children's writer, Arthur Ransome, "It's awful fun. Boy's stories. You just indulge the pleasure of your heart."

4. Appreciation and enjoyment of children's literature can be imparted to children through conversations and discussion, too, as well as in story telling and creative dramatics. In the lab situation mentioned throughout this training program, the trainee must have opportunities to work with teachers and youngsters in children's literature, storytelling, and creative dramatics.

5. Again, much will be learned on the job as the Educational Media Specialist works with youngsters and teachers and learns from them what books are about, what certain youngsters look for and enjoy, and how to stimulate a child to take a book, read it, and share it with someone else.

6. Trainees could be given opportunities to learn the kinds of books published by a given publisher because this would help them prescribe material for an individual's particular interest and also aid in selection.

Job Responsibilities - Printed Materials

Because this proposal sees the Educational Media Specialist as an instructional leader whose role in the Center here in described calls for a generalist rather than a specialist background, his training does not require that he be a librarian. However, a librarian may be on the support staff of the Center and would perform important specialized functions. A paraprofessional on the support staff could handle such clerical functions as circulation, re-shelving, filing, etc. In either case, it would be the responsibility of the Educational Media Specialist to supervise the activities of the librarian and clerk to insure that the program of the Media Center is carried out. He would also be responsible for the following aspects of his role:

A. Use of Printed Materials With pupils

1. He will insure that youngsters have a variety of material representing different opinions on all issues including those of a controversial nature to insure early introduction to matters of concern to responsible people when the youngster has expressed a readiness for this.

2. He will know the collection in the Media Center so that he can help the individual learner and group find the material they need to augment a program of individualized instruction.

3. He will help pupils learn to use the Media Center and to understand its organization as he comes to work with them daily.

B. Selection

1. The Educational Media Specialist will select printed materials for the Media Center which relate to the K-6 instructional program and the reading interests of children of these ages.

2. He will work with staff and pupils in the selection of printed materials in order to implement requests for materials for specific programs, individual interests, and meet the needs of a variety of reading abilities.

3. He will establish selection procedures that involve staff and pupils in the evaluation of new printed materials based on their relevance to the instructional goals of the school, the implementation of program, their ability to stimulate learning and interest, their contribution to a program of individualized instruction, and their appropriateness for the maturity, interests, and socio-cultural background of the children served by the school. He will use and make available for staff use the recommended tools of selection such as: _Horn Book, Children's Book Center, School Library Journal_ and _Children's Catalog_.

C. _In-Service Education of Teachers in the Use of Printed Materials_

1. He will conduct teacher workshops to teach them how to instruct youngsters in the organization and use of the Media Center and card catalog.

2. He will conduct in-service workshops for the staff to introduce them to the materials in the Center, their application in the instructional program, the objectives of the material, and their possible utilization with students.

D. _Organization of Printed Materials in the Media Center_

1. He will be responsible for the processing, cataloging, and circulation of printed materials.

2. He will be responsible for a system of organization of materials and their retrieval that will be conducive to ready pupil use.

3. He will supervise the replacement of used and the addition of new printed materials in accord with the objectives stated above.

Training - Printed Materials

His training should include a laboratory situation, perhaps in an elementary school media center, where he could practice in a simulation situation the following aspects of job responsibility in relation to printed materials:

A. Use of Printed Materials with Pupils

1. He will work with children in a lab situation in helping them find printed materials that they need for study or to satisfy an interest and will relate these to pupil ability and need.

2. He will visit Media Centers in schools where a program of individualized instruction is carried out.

3. He will visit Media Centers in a variety of socio-economic settings in schools where individualized instruction is implemented to widen his understanding of kinds of reading materials available.

B. Selection

1. This laboratory session should provide him with the chance to use basic selection and cataloging tools.

2. He should work with a group of teachers to evaluate new printed materials using instructional goals of the school, stated purpose of the materials, and testing of the material as criteria for selection.

C. In-Service Education with Teachers in Use of Printed Materials

1. He should help a curriculum study group find materials they need to implement a program.

2. He should conduct workshops to help teachers learn and get ideas about how to teach basic library skills.

D. Organization of Printed Materials in the Media Center

1. An introduction to organization of printed materials using an elementary school media center as a laboratory and an outstanding school librarian as instructor might be provided.

   a. Give an overview of a standard elementary collection and where lists of same can be located.

   b. Give an overview of a standard elementary collection and where lists of same can be located.

   c. Teach the Dewey Decimal and other systems of organization.

   d. Give instruction in uses of and maintenance of a card catalog.

2. The trainee should have an opportunity to study information retrieval systems and various methods of organization of materials.

This training is an overview only. In order to supervise the activities of a librarian and paraprofessional depending on the kind of support staff he has, he should have this background. The insight necessary to actually be able to do this supervision may be gained through this overview in his lab training. The ideal laboratory would be one where this kind of center and philosophy of individualized instruction was already functioning.

Job Responsibilities - Audio-Visual Materials

The educational market is flooded with audio-visual materials. The Media Center described in this paper demands a wealth of materials in order to realize its program of implementing individualized instruction. The Media Specialist cannot know all the materials on the market, but he can know those in his Center, what is needed to facilitate his school's program, and what he must obtain to support that program.

A. Use of Audio-Visual Materials with Pupils

1. He will know the material in his Media Center and work with children to:

    a. find materials of special interest to the individual,

    b. find materials of appropriate difficulty and maturity level for the individual, and

    c. find the material that will delight or stimulate an individual to learn.

2. He will work with, talk with, and come to know individual pupils and groups of youngsters in order to more readily provide them with material that will interest and challenge them to learn and discover.

B. Selection

1. He will work with curriculum study groups so that he can get materials for preview as they require them or suggest materials they could use.

2. He will give materials on preview to teachers, pupils, and curriculum study groups for study and they will:

    a. use school instructional goals and pupil behavioral objectives in units of instruction as criteria for evaluation,

    b. use visual and audio criteria for evaluating the worth of AV material,

    c. use their knowledge of the subject, experience, and producer's test of the material to evaluate it educational value, and

    d. make a recommendation for or against purchase to the Media Specialist.

3. He will know the sales representative of major producers of educational materials, will advise them of the school's program, and will establish preview privileges with them.

C. In-Service Education of Teachers in Use of Audio-Visual Materials

1. He will know the material in his Media Center and work with teachers to:

   a. find materials appropriate to individual pupils or groups of children,

   b. find materials that motivate and stimulate learning in an area of identified need for individual pupil or a group,

   c. find materials that help the teacher implement specific goals or behavioral objectives in an instructional program, and

   d. package or organize various presentations of materials for instructional programs determined by the staff.

2. He will discuss materials with a teacher of the staff and suggest materials that will initiate an idea or stimulate a teacher to creative work with youngsters.

3. He will conduct workshops on materials to:

   a. introduce materials,

   b. share ideas about creative uses of materials,

   c. help staff see materials as initiators of learning and discovery and springboards forfurther learning,

   d. help staff to see that materials are not complete in themselves, but that as youngsters begin to learn they find new uses for materials, twist them to meet their own needs, use them to start down very individual paths of learning and discovery, and use them to get ideas to develop their own materials that more precisely express their needs, interests, and learning.

4. He will learn what is going on in classrooms and will constantly enrich that learning environment with materials relevant to the activity.

D. Organization of Audio-Visual Materials

1. He will supervise the catologing of audio-visual materials in the Media Center.

2. He will insure that cataloging of audio-visual materials in the Media Center follows a system that takes into account the needs of youngsters to have information and knowledge readily retreivable.

Training - Audio - Visual Materials

Trainees will have some knowledge of materials and their uses because of classroom experience. As in the case of printed material, audio-visual material may in itself be excellent, but it cannot be used except in relation to specific instructional goals and pupil interest and ability. A variety of materials does not insure individualized instruction; rather the individual's needs, interests, and abilities must be diagnosed in terms of instructional objectives and material chosen to synthesize these.

The training program should include a lab experience that will give the trainee real or simulated experiences with audio-visual materials and their use, selection, and organization as noted in the following pages.

A. Use of Audio-Visual Materials with Pupils

1. The training program introduces uses of materials in the classroom through use of films that show materials

utilization: Oakleaf Project, Project Discovery, etc.

2. Exposure to a variety of material is essential to developing an understanding of the special purposes and strengths of different kinds of material, to see how these can be utilized in a variety of instructional formats, and to learn how careful consideration must be given to the kind of material selected for a given learning situation and/or individual.

This skill can be developed in the lab experience, and the trainee should be responsible for correlating materials with the individual's instructional objectives, need and teaching style in a simulated or real experience.

B. Selection

1. Once again the trainee should be able to visit with leading educators who are involved in the development of materials to get the impact of the research, concerns, questions, and decisions that go into producing materials for meaningful learning experiences.

2. Trainees should have opportunities to look at materials in terms of:
   a. what the AV selection tools say about the material,
   b. who produced it,
   c. the credentials of the author(s)
   d. the testing of the material with pupils and results,
   e. the diagnostic and evaluative devices used in the testing, and
   f. the quality of its visual and/or audio presentation.

3. The trainee needs time to browse and become familiar with types of materials in various areas and to visit conference and producer displays of materials.

C. In-Service Education of Teachers in the Use of Audio-Visual Materials

1. His training must provide him with the chance to become acquainted with the means of keeping abreast of materials

development and research so that he can share this information with staff.

2. He will do research to find what materials are being used in significant curriculum projects and how they are being used.

3. He needs an opportunity for meaningful visits with teachers and pupils about their use of materials, the problems they encounter, the weaknesses they find, the presentations that are most meaningful, and their suggestions for improvement.

4. The trainee should visit elementary school materials centers and discuss with teachers and youngsters their use of materials and how they use them to individualize instruction.

D. Organization of Audio-Visual Materials

1. He will learn organization and cataloging of audio-visual materials for ease of retrieval.

2. He will work with teachers and pupils to instruct them in how to locate material.

3. He will learn synthesis or organization and cataloging of both printed and AV materials.

Job Responsibilities - Equipment

The Educational Media Specialist has the following job responsibilities related to use of equipment and production of materials. An audio-visual specialist may be on the staff of the Media Center and would perform important specialized tasks in the selection of material, instructing in its use, producing materials for instructional programs, and assisting in the selection of equipment and instruction in its use.

1. The Educational Media Specialist will assist pupils to use the AV equipment for instructional programs or for personal inquiry or browsing.

2. He will teach pupils and teachers the particular advantages of using some equipment for individual or small group instruction while using other equipment for large group work.

3. He will introduce new equipment to the staff that will facilitate the school program.

4. He will conduct workshops to teach the uses of production equipment.

5. He will select equipment for use in implementing the school instructional program.

6. He will comply with and work to establish systemwide specifications for equipment.

7. He will be responsible for the maintenance of equipment and may send it for repair and cleaning to a within-the-system service or an out-of-the-system service.

8. He may have as a part of his support staff a para professional who would maintain equipment with the Media Specialist responsible for the supervision of this staff member.

9. He will work with teachers and pupils in producing materials to meet specific instructional objectives for a class, a child, or a project.

10. He will encourage the original creation and production of materials by teachers for use in individualizing instruction.

11. He will encourage children to produce materials to use in reporting and sharing their learning experiences.

Training Equipment

As has been stated throughout the training program of the Educational Media Specialist, actual experience in a lab situation or seminar is crucial.

1. He will learn how to instruct children to use equipment through 8mm presentations, use of transparencies, and actual experience with children using equipment.

2. He will have real or simulated experiences with other trainees in teaching staff how to use equipment with youngsters.

3. He should be introduced through exhibits and lab situations to the advantages of equipment easily operated by pupils such as cartridge load, self-threading machines, etc.

4. He will be introduced to general criteria for equipment selection.

5. Besides equipment specifications, he will have opportunities to consider such criteria for selection as ease of operation by pupils and teachers.

6. He will be introduced to simple maintenance procedures such as bulb replacement.

7. He will be introduced to the feasibility of in-the-system maintenance or out-of-system repair services.

8. He will have opportunities to explore teacher production of materials in terms of:
   a. classroom needs,
   b. time, and
   c. the difficulty of the process.

9. He will have real and simulated experiences in teaching teachers to use production equipment.

Job Responsibilities - Instructional Television

1. He will conduct workshops for staff on use of the video tape recorder:
   a. for recording of classroom and individual pupil projects,
   b. utilization of commercial programs, and

   c. use on field trips, with visitors, and assemblies in order to record for later discussion or learning reinforcement.

2. He will establish a video-tape bank of recordings of visitors, field trips, special school programs, and commercial programs for use by classes and in subsequent learning situations.

3. He will inform the staff of commercial programs that will augment an instructional sequence and will videotape this if necessary for use in the classroom at the appropriate time.

4. He will be responsible for or supervise the activities of a paraprofessional or the AV technician in:
   a. maintaining the equipment.
   b. scheduling use,
   c. instructing in its operation,
   d. pre-recording programs for later use,
   e. recording assemblies or special school functions,
   f. operating. the TV workroom, and
   g. insuring that the program of the Media Center is implemented.

5. The Educational Media Specialist will work with the building principal to initiate the use of the video-tape recorder for teacher self-evaluation purposes.

Training-Instructional Television

His training program gives him the following opportunities in learning to utilize educational television and the video tape recorder:

1. He will learn the use of video tape recorders.

2. He will have real and simulated experience at teaching others to use the equipment.

3. He should be introduced to programs available through instructional television.

4. He should have the opportunity to select and organize materials to complement instruction via instructional television and to use them with teachers and pupils.

QUALIFICATIONS FOR ENTRANCE INTO THE TRAINING PROGRAM

The following qualifications for admittance to the program would be helpful to a trainee in developing the skills of an Educational Media Specialist.

1. General
    a. accepts and adapts to change,
    b. enjoys the stimulation of new ideas and processes,
    c. experiments willingly and attempts new ideas,
    d. listens to the ideas, concerns, and questions of others with acceptance, attention, and interest,
    e. exercises the ability to ask questions of others that stimulate or clarify their thinking and searching,
    f. exhibits enjoyment at being with many people at all hours of the working day,
    g. seeks sincerely for the ideas and advice of others, and
    h. gives unceasingly of his time and thinking in the promotion of the philosophy and instructional goals of the school.

2. Teaching and Learning

    The educational media specialist:
    a. has classroom experience,
    b. exhibits understanding of the processes of child growth and development, and
    c. knows learning theory.

A PROJECTION TO THE FUTURE:
COMPUTER ASSISTED INSTRUCTION AND MEDIA CENTER

Computer Assisted Instruction offers a cutting edge breakthrough in individualizing instruction. CAI is being used in several places across the nation today: California, Mississippi, Illinois, Kentucky, and Michigan. Recently, a CAI system became operational in New York City.

A number of instructional programs have been developed for use in CAI . These include second through sixth grade mathematics, initial reading instruction, and spelling. Other materials are being readied.

Three instructional presentation modes are used in CAI:

1. Drill and practice . The teacher introduces the concept in the classroom and the youngster receives drill and practice on the concept at a computer controlled pupil terminal. The pupil moves through a lesson written at a level of difficulty he can comprehend and at his own learning pace.

2. Tutorial. The child is introduced to the concept at the pupil terminal with little or no teacher instruction. Again he is paced through the materials at his own speed and level of comprehension.

3. Simulation. This is the most sophisticated mode of presentation in CAI. It allows a child to carry on a conversation with the computer. The computer interprets each response made by the pupil accordingly. Consequently, each child in the program could follow a unique pattern of learning.

Individualized instruction is enhanced by CAI . Diagnostic tests can be administered to each child by the computer. On the basis of his response, he is branched to those lessons that this pre-test indicates he needs and at the level of difficulty indicated by his test responses. He is then paced through the instructional sequence at his own learning rate. At the end of each lesson, or at the end of lesson frames depending on the presentation mode, the computer program branches him to easier or more difficult material depending on his responses.

The computer offers an excellent management tool. It can keep a record of pupil's past performance. Each day a teacher can get a printout of the child's responses to each frame as well as the number of time outs on the various questions.

At present, CAI is in an embryo stage, but its potential offers tremendous opportunities to the educator in individualizing instruction and in research in learning. To the elementary school staff, it provides a diagnostic tool and a unique way to present materials to pupils at their own level of ability. It saves the teacher and the class from classroom drill and practice routines which at best only meet the needs of a few learners at any given time. However, drill and practice does reinforce learning. CAI can manage this and save the teacher time for personal and creative contact with pupils.

It is hoped as teachers become familiar with the materials available through CAI, they can prescribe lessons for learners when they express a readiness and need for them. The computer may also do this through diagnostic instruments.

Adjacent to the Media Center of the future and an integral part of it is a Computer Assisted Instruction Learning Center. This might house up to thirty student terminals controlled by a central processor computer. A youngster could go to the CIA Learning Center and take a lesson at any time as prescribed by his teacher.

The training program of the Educational Media Specialist should acquaint him with the development of computer assisted instruction. He should visit projects and systems where CAI is being used and where materials are being developed for use in such a system.

He should see his job responsibility as keeping current with new developments in this field, informing the building principal and staff, and planning for the time when this technological advancement can become part of his Media Center's program in individualizing instruction.

The Educational Media Specialist is one of several professional roles in the elementary school of the future. As a team member, he brings certain basic skills to the teaching-learning situation. As professional teacher he employs the basic tools of inquiry of the behavioral scientists to assess pupil behavioral patterns, and develop instructional strategies for improved learning.

THE ASSOCIATE TEACHER ROLE

Change and the resultant conflicts give rise to social forces which can impinge on situations to an irresistible degree. Problems of finance and manpower in the case of American education have forced a change in the present structure of teaching personnel. Several types of auxiliary personnel are now joining the teacher on the educational scene.

A distinction may be made between the general use of the term auxiliary or helping personnel and more specific meanings of the terms "auxiliary" and "ancillary." Auxiliary personnel has come to refer to those who work under the direct supervision of a teacher while ancillary personnel may refer to those who function outside the classroom such as guidance counselors, school nurses, and curriculum specialists. For the purposes of this program model, however, all those who assist the teacher in the general process of instruction will be considered auxiliary personnel.

The use of auxiliary personnel in the schools is not new. Various types of helpers have been used since the first parent volunteered to allow the teacher to "room in" as part of his teaching salary. The thing that is new is the large number of helpers now used and the institutionalization of their roles. Such proliferation of helpers has led to some misunderstanding of roles by both teachers and auxiliary personnel. It is important, of course, that misunderstanding be replaced by information and appreciation in order that maximum use of auxiliary personnel may be made.

New forms of staff differentiation require patterns that are acceptable to teachers and parents as well as the auxiliaries and the community as a whole. Large city school systems have found little difficulty accepting innovative patterns of differentiated staff because the use of auxiliary personnel appears as a solution to many problems. Parents see the use of auxiliaries as a means of providing for their children more personal attention. Teachers and school management see in non-professional helpers a means of handling some of the rapidly increasing detail now associated with instruction in large school systems. Economists and social planners see possibilities for new jobs, economic advantages, and self-renewal. Similar advantages are also readily apparent to the individuals who wish to fill the auxiliary positions. Even the smaller school systems are seeing needs for auxiliaries now with crowded classrooms and modern instructional paraphernelia assuming burdensome proportions.

Differentiation within the school staffing pattern is predicated upon identification of essential task constructs. Personnel can then be assigned according to individual competency in the performance of specific tasks. One of several recent designations of levels of responsibility within a school staffing pattern is Reissman's suggestion of a career "ladder."[1] Not only are specific responsibilities designated, but the "ladder" invites auxiliary personnel to move forward from one assigned responsibility to another as the individual auxiliary is ablt to carry the more advanced responsibility. The five steps in Reissman's career "ladder" are:

1. Aide--who would fill such responsibilities as
    - general school aide
    - lunchroom aide
    - teacher aide
    - family worker (or aide)
    - counselor aide
    - library aide

2. Assistant--who would fill such responsibilities as
    - teacher assistant
    - family assistant
    - counselor assistant
    - library assistant

---

[1] Reissman, Frank, New Careers in Education. Union, New Jersey: A Proposal Prepared for Scientific Resources Incorporated, January 1967

3. Associate--who would fill such responsibilities as
    - teacher associate
    - home-school associate
    - counselor associate
    - library associate
    - social work associate

4. Teacher-intern--who would fill such responsibilities as
    - student teacher
    - student home-school coordinator
    - student counselor

5. Teacher

According to the differentiation shown in the career "ladder", the teacher is concerned with developing the strategy for learning and the intern is gradually being inducted into this "teacher" level of functioning. They are assisted on two levels by auxiliary personnel. The "associate" serves as a paraprofessional in a team teaching situation--the role referred to in this program model as the instructional associate. The above "assistant" and "aide" are concerned with implementing the more routine technology of the educative process and are referred to as aide or educational technicians in this report. Preparation programs directed toward these levels of auxiliary service are in their infancy, but interest is growing rapidly in such programs and community junior colleges, particularly, are beginning to offer them.[2]

---

[2] The following community junior colleges are already involved in programs or are in the process of planning programs for the preparation of auxiliary personnel: Merritt College, Oakland California; Central Piedmont College, Charlotte, North Carolina; Cuyahoga Community College, Cleveland, Ohio; and Miami-Dade Junior College, Miami, Florida

THE ASSOCIATE INSTRUCTIONAL ROLE

The goals to be achieved through the associate instructional role (and other similar auxiliary roles) are:

1. Enrichment of the educational program by providing flexibility, additional resources, and individualized instruction.

2. Improvement in teacher efficiency. The use of associate teachers and educational technicians provides a long-sought opportunity to refine the role of the teacher. The "teacher-leader" concept is gaining recognition. According to this concept, the teacher-leader is an orchestrator of the components of the educative process.

3. Enlargement of community participation in the educational process. The preparation and employment of associate teachers is usually accomplished within the community of the employing school. Their auxiliary role in the school and their families and friends throughout the community cause them frequently to be effective ambassadors between school and community.

4. Personal growth and self-improvement for the auxiliary worker.

The preparation program for the associate teacher is based upon a clear delineation of the work that needs to be done to achieve the stated objectives. It should be noted that the objectives comprehend benefits for both school and auxiliary personnel. This two-way view of the preparation of auxiliary personnel is implicit in the following statement from Sidney Fine:

> "...using this strategy, the first step is to determine what needs to be done to achieve a particular objective--let us say, urban planning. This is followed by an examination of the states-of-the-arts involved to establish the technologies and various alternatives available to get the work done. On this basis, it is then possible to move

directly into the technical considerations described above, whereby:

1. The work that needs to be done to achieve objectives is clearly delineated.
2. The optional ways in which workers can perform the work are explored.
3. The functional performances of the workers are decided upon in relation to the technologies to be used.
4. The functional performances are then organized into jobs.
5. The jobs are related to each other by delineating experiences which lead to a higher functional performance.
6. Curricula are developed that lead to achievement of competencies necessary to promote to each higher functional level.[3]

INSTRUCTIONAL ASSOCIATE PREPARATION PROGRAM MODEL

In this teacher preparation program model the training program for the associate teacher is built upon four basic assumptions and several propositions or informal criteria. They are listed below.

Basic assumptions--It is assumed that:

1. The associate teacher has already received some training in the more basic skills required of an aide, such as the 3R's, the use of simple equipment, and certain clerical skills.

---

[3] Fine, Sidney A. Guidelines for the Design of New Careers. Kalamazoo, Michigan. The W. E. Upjohn Institute, September 1967

2. The person training for the associate level is on an Associate in Arts Degree or similar academic program.

3. Courses are offered on-site or at a nearby college.

4. An on-site clinical professor or practicum coordinator is assigned from the credit-granting institution to coordinate the training program.

Propositions--It is proposed that:

1. When coupled with previous training the program permit continued progress on a career ladder.
2. Credit be given for previous experience.
3. Training in team teaching be included.
4. Clear delineation of future classroom responsibilities be made.
5. Learning be emphasized by doing.
6. Concepts be developed from concrete examples.
7. Training be explicit.
8. Training in technical skill be provided.
9. Foundational concepts be included.
10. Desirable personal qualities and attitudes be identified.
11. Provision be made for self-development of the individual trainee.
12. Listening and decision-making skills be built.
13. Good speech patterns, penmanship, and clerical skills be developed. (See list of skills to be used in evaluating curriculum).

14. The training program indicate the acceptability in the current social milieu of the associate teacher level as a terminal point.

15. The associate teacher's training encompass more than one grade level, thus facilitating the continuing association of the auxiliary helper with a small group of children.

Since it is assumed that the individual who wishes to become an associate teacher has already received some training in the more basic skills required of an aide or an educational technician, a description is needed of the training program considered desirable for an aide. Such programs are being worked out by many of the larger school systems.

The following outline is from the training program developed by Wayne County in New York State.[4]

For Aides

Core I - Human Growth and Development

Core II- The School as an Institution

Core III- Skills Workshop (Job Related and differentiated by groups to be served)

1. Skills to Use with Groups of Children
    a) Reading - Communications
    b) Math
    c) Social Studies
    d) Science

---

[4] Suggested Model of a Pre-service and In-service Training and Employment Program for Auxiliary Personnel in Education and For the Teachers With Whom They Will Be Working--Designed for Wayne County, New York; Prepared by Bank Street College of Education.

    e) The Arts
    f) Lettering
    g) Operation of Audio-Visual Equipment

2. Skills to be used with individuals
    a) Observational skills
    b) Listening skills

3. Organizational skills.

4. Operation of Office Machines and general clerical skills.

Core IV- Remediation

For Teachers

Core I- Analysis of Experiences in a Curriculum Workshop

Core II- Special Learning Needs of the Disadvantaged

Core III- The School - Roles and Relationships

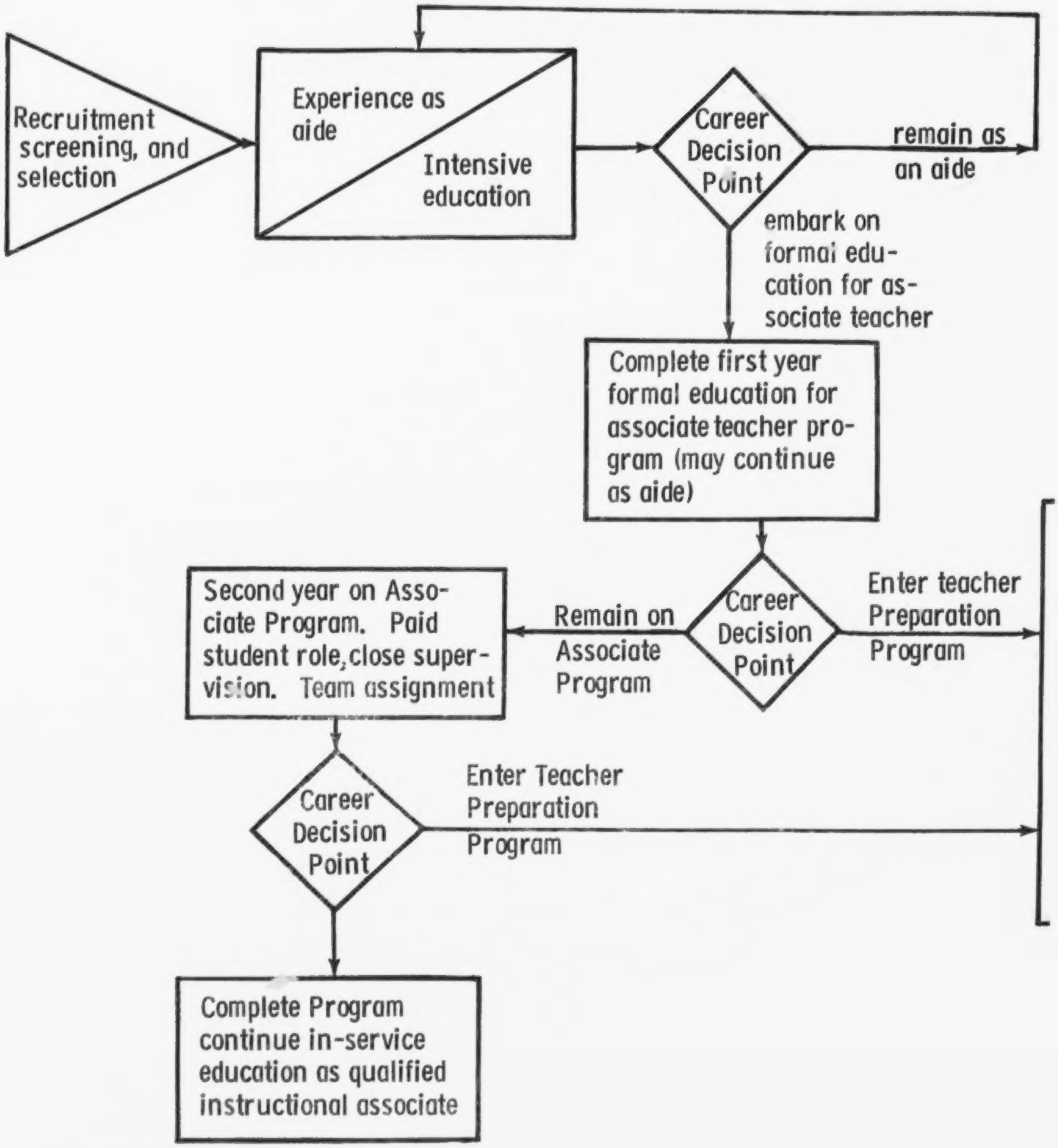
For Teacher and Aides together

Interaction Groups (Sometimes called group counseling
or sensitivity training)
Integrating Colloquium

The experiences were structured around concrete and realistic base. Scheduling was flexible to take into account the work schedule of the part-time students. Methodology emphasized learning through doing, role playing, simulated exercises, and utilizing the style of the learner. On-the-job training was intended to provide additional preparation for specific tasks.

CAREER DECISION

The teacher preparation program model recognizes the various career decision points faced by auxiliary personnel. The following diagram shows the flow of experience, decisions, and training as this program model envisions the process. In this flow, it should be noted, an auxiliary may complete the first year of formal education for the associate teacher program and still continue as an aide; he may complete the entire two-year program and become a qualified instructional associate; or he may if he chooses enter the teacher preparation program at either of these points.


Recruitment screening, and selection
Experience as aide
Intensive education
Career Decision Point
remain as an aide
embark on formal education for associate teacher
Complete first year formal education for associate teacher program (may continue as aide)
Career Decision Point
Remain on Associate Program
Enter teacher Preparation Program
Second year on Associate Program. Paid student role, close supervision. Team assignment
Career Decision Point
Enter Teacher Preparation Program
Complete Program continue in-service education as qualified instructional associate

STAFFING

The staffing pattern used for the instructional associate preparation program needs to be more flexible than does the pattern for teacher training program. Since the program usually involves the cooperation of a number of institutions, the necessary flexibility of staffing pattern requires expert coordination. The following titles and positions suggest a possible staffing pattern.

DIRECTOR The director carries the responsibility for general coordination of the program, initiating planning, evaluation, and improvement as well as reporting to appropriate department chairmen. The director maintains close relationships with various departments and disciplines, coordinating the instructional associate preparation program with the elementary school teacher preparation program.

INSTRUCTIONAL SPECIALIST These specialists teach core courses and serve as consultants to the field instructors. They provide an entree for an interdisciplinary approach.

INTERN CONSULTANTS The opportunity for practicing teachers to participate in the training of instructional associates is desirable and almost mandatory for the success of the program. Intern consultants, whose primary responsibility is working with teacher-interns, are in an ideal position to assist both beginning teachers and associate-teacher-trainees helping them to learn to work together most effectively.

Other staffing for this program is coordinated with the teacher education program. A unique aspect of staffing, however, is the fact that it must include joint responsibility of community college and four-year teacher education institutions when they function together in the training of instructional associates. While the staffing of basic academic experiences might occur in the community college, reciprocal agreements for transfer to the teacher education program in a four-year college or university are essential.

CURRICULUM

Using as guideposts the goals, basic assumptions and propositions listed above, specific curricular experiences can be designed. The general areas of need are given term-hour designations. A next step is to organize these areas into constructional modules as was done in the teacher education program. However, these modules may need to be structured in a somewhat different way for certain groups of students.

In developing the Instructional Association Program, it was assumed that early college experiences might be and perhaps should be the same as those of the prospective teacher. Thus, general education experiences in the Career Decision Seminar, Communications, Fine Arts, Children's Literature, and Human Learning could be joint offerings. Such offerings would provide the breadth of background with depth in relevant specific areas which is needed by the instructional associate.

Some differentiation, however, is obviously necessary. The tasks of the teacher and the associate are quite different, and each should be trained in depth in those areas in which he will perform. In the following sections are outlined some basic experiences for the instructional associate. Another attribute of the program is that it permits a student to transfer with relative ease from the instructional associate program to the teacher preparation program.

One method of evaluating this curriculum is to determine the skills needed by an associate teacher and compare the training program with requirements. From a review of literature, demonstration project reports and research the following skills are listed as needs:

1. Self awareness.
2. Writing skills.
3. Speaking skills.

4. Listening skills.

5. Reading skills.

6. Knowledge of social trends and issues

7. Strategy for planned change (views of institutional change patterns).

8. Group skills.

9. Organizational skills.

10. Skills of logical thought.

Provision for obtaining these skills must be made if the curriculum is to be complete and relevant. In order to provide for the acquisition of needed skills, the following curriculum is offered.

Experiences designed for both prospective teachers and associates:

	Quarter credit hours
Natural Science in General Education	12
Social Science in General Education	12
Humanities in General Education	9
Communications	3
Human Learning	5
Fine Arts	9
Literature for Children	3
Career Decision Seminar	3

Experiences designed especially for associate teachers;

	Quarter credit hours
Self-development Seminar	3
Associate Instructional Role-Development	3
Physical Education and Safety	3

Instructional Materials and Equipment	3
Associate Teacher Role--Working with children in Subject Areas	3
Student Associate Teaching	12

Brief outlines of these experiences are given in the following paragraphs. Much more detailed descriptions of experiences for prospective teachers are to be found in Sections III, IV, and V, and these descriptions apply to the preparation program for the instructional associate wherever teachers and associates require the same experiences.

SCREENING AND SELECTION OF CANDIDATES Techniques of screening candidates should be kept skeletal since a rigid or ponderous system is not desirable. Individuals should, as much as possible, be screened "in", not "out." Written tests and other measurement instruments can be helpful with certain individuals, but the personal interview is the most valuable device for screening.

Since it is suggested that the instructional associate candidate have some experience as an aide, it becomes possible to recruit, select and screen during the time they are employed as an aide. The in-service seminars provide further opportunity for screening and recruitment.

EVALUATION Evaluation of the program must be continuous yet contain definite required checkpoints. The training program should be evaluated using the criteria previously established as a measurement.

The end of the practicum is suggested as a definite checkpoint. The entire team should participate in evaluation and feedback at this time. Evaluation and feedback should also occur at the end of the first year of employment as an instructional associate.

EXAMPLES OF SPECIALIZED LEARNING EXPERIENCES

Examples of a few specialized learning experiences for the instructional associate are described in the following paragraphs. These could be used in either the pre-service or in-service training of auxiliary personnel and could be adapted to a great variety of needs.

THE SELF - DEVELOPMENT SEMINAR

The purpose of this experience is to aid each trainee to be more self-confident.

SELECTED OBJECTIVE The seminar should assist the instructional associate in improving his own behavior patterns.

1. Each person should identify a personal shortcoming and improve this area of his behavior. The action should be made to take positive action evident to others by a change of behavior.

2. He should show the ability to identify those personal characteristics which have a high correlation to successful teaching by choosing them from a list of character traits.

3. He should be given an opportunity to develop social grace through role-playing.

4. He should show a knowledge of the relationship of a positive self-concept, as a causative factor, to success of a pupil by emphasizing this approach in a tutoring situation.

METHODOLOGY Role-playing, tutoring, reading, small group discussion, and counseling.

ASSOCIATE INSTRUCTIONAL ROLE DEVELOPEMNT

The identification of the unique contributions of the instructional associate and translation of these into instructional strategies is one purpose of this seminar. A second is to place specific aspects of instruction in the broader perspective of education.

SELECTED OBJECTIVES Each trainee should develop the ability to:

1. Discuss the various specialized functions and roles of educational institutions.
2. Describe the organization of the school district, using diagrams and flow charts, and to discuss the various staff relationships.
3. Recognize decisions which are an inherent part of his role and to distinguish between them and the decisions which are the concern of the teacher.
4. Focus on critical decision points in classroom activities as evidenced by correctly completing a "Focused Observation Form."
5. Be cognizant of professional ethics and their relation to the associate teacher.
6. Understand some of the needs and concerns of the community.

METHODOLOGY Visitation to schools for handicapped children and mentally retarded children; discussion with administrators concerning tax structure of school districts, organizational patterns, and job descriptions; simulation; reaction to selected portions of the Clinic School Manual (Learning Systems Institute, M.S.U.) which focuses on classroom decisions; and personal interviews.

PHYSICAL EDUCATION AND SAFETY

The instructional associate often is responsible for playground supervision under the direction of a teacher. The experiences included herein are designed to provide the necessary background for such activities.

SELECTED OBJECTIVES Each trainee should develop the ability to:

1. Display depth in game repertoire by listing within, ten minutes, two games for each of three game locales and other games for children of different age levels.

2. Cite the rules for major sports.

3. Discuss safety precautions with pupils and apply them effectively on the playground in the school, and on streets and roads.

4. Display proper first aid techniques in simulated accidents.

METHODOLOGY Game demonstrations; visits to YMCA's, recreation departments, and a variety of playgrounds; films; group discussion and individual counseling; and simulation.

INSTRUCTIONAL MATERIALS AND EQUIPMENT

The instructional associate may operate audio-visual equipment and make appropriate instructional materials under the direction of the teacher. The techniques for making effective instructional aids and operating needed equipment are important resources in the school.

SELECTED OBJECTIVES Each trainee should develop the ability to:

1. Operate filmstrip projectors, tape recorders, 16mm film projectors, overheads, opaques, and record players by using each for the instructor or for a peer group and stating where and how they can be obtained and procedures for acquiring service.
2. Make transparencies, overlays, and lifts.
3. Collect pictures for a file which would be relevant in the elementary school.
4. Display and arrange instructional materials.
5. Work with children who are using audio-visual materials.

METHODOLOGY Laboratory organization with small group and individual demonstrations.

WORKING WITH CHILDREN IN SUBJECT AREAS

The instructional associate, working under the teacher's direction, listens to reading groups, works with individual pupils, grades papers, and performs other instructionally related tasks. The purpose of this series of experiences is to provide sufficient background for such tasks.

SELECTED OBJECTIVES Each trainee should develop the ability to:

1. Mark the kind and extent of primary children's reading errors, and synthesize them for ready analysis by the teacher.
2. Locate process errors in mathematics computation papers and to indicate the extent of error for the teacher.
3. Work with small groups in social studies instruction.
4. Prepare, using a laboratory manual, materials and equipment for science experi ements.
5. Administer and grade standarized tests.

METHODOLOGY Simulation, role-playing, video tape replays, programmed instructional situations, and taking tests and examining results.

STUDENT ASSOCIATE TEACHING

The purpose of this experience is to provide an opportunity for the prospective associate teacher to employ his skills in helping pupils and teachers and, by functioning in a team, to recognize more clearly his own role in the total instructional process.

SELECTED OBJECTIVES Each trainee should improve through practice his ability to:

1. Function in an instructional team as an associate teacher.
2. Recognize the possibilities and the limitations of his role.
3. Evaluate and attempt to improve his own performance.
4. Utilize previous educational background and translate it into operational strategies.

METHODOLOGY Each prospective instructional associate is assigned to a team including interns, intern consultants, teachers, and professional instructional leaders. Senior staff guide his efforts and assist him to function more effectively in the team. A concurrent seminar continues to focus on needed skills and interpersonal relations.

BIBLIOGRAPHY

Pamphlets and Articles

Auxiliary School Personnel. Washington, D.C.: National Commission on Teacher Education and Professional Standards, 1967.

Bowman, Garda W. and Klopf, Gordon J. Guidelines for Career Development of Auxiliary Personnel in Education. Albany: New York State Education Department, June 1968.

Bowman, Garda W. and Klopf, Gordon J. New Careers and Roles In The American School. New York: Report on Phase One, a Study of Auxiliary Personnel In Education, Bank Street,College of Education, September 1967.

Dady, Milan and Denmark, George. Program Analysis of Auxiliary Utilization in Eastern Kentucky. Washington, D.C.: for the Office of Economic Opportunity, June 1968.

Ferver, Jac. Teacher Aides, Handbook for Instructors and Administrators. Racine, The University of Wisconsin, 1968.

Fine, Sidney A. Guidelines for the Design of New Careers. Kalamazoo, Michigan: The W. E. Upjohn Institute, September 1967.

Goodale, Eunice C. and Weisz, Vera C. Assistant Teachers and Teachers' Aides--Training and Roles of Auxiliary Personnel for Early Childhood Education Programs. Boston: Garland Junior College, 1967.

Longberg, Keith. A Look at Teacher Aides and Their Training. East Lansing: Metropolital Educational Research Association, June 1968.

New Careers. New Career Development Center, New York: Vol II No. 1, Spring 1968.

New Partners In The American School. New York: Bank Street College of Education of OEO, November 1967.

Riessman, Frank. *New Careers In Education*. Union, New Jersey: A Proposal Prepared for Scientific Resources Incorporated, January 1967.

Selick, Aileen, *Urban Area Employment Project*. Detroit Public Schools, Division of School Community Relations, 1967.

Suggested Model of a Pre-Service and In-Service Training and Employment Program for Auxiliary Personnel in Education and for the Teachers With Whom They Will Be Working--Designed for Wayne County, New York. New York: Bank Street, College of Education, 1968.

TAP, The Teacher Aide Program. Washington, D.C.: Washington School of Psychiatry, August 1967.

Weisz, Vera C. *A Junior College's Approach to Training Auxiliary Personnel in Education.* Washington, D.C.: Office of Economic Opportunity, June 1968.

Wiley, Wretha. *Highlights of the Education Component of the Minneapolis, Minnesota, New Careers Program*. New York: New Careers Development Center, A Field Report, April 1963.

The Continued Professional Study of Teachers was developed by the following staff:

Mrs. Lucille Beacon	Coordinator
Miss Geraldine Blanchard	Media Specialist Role
Mrs. Caroline E. Born	Consultant, Resourced Teaching
Mr. Richard Escott	Consultant, Resourced Teaching
Mrs. June Gabler	Continued Professional Study
Miss Edith Ireland	Continued Professional Study
Mr. Keith Longberg	Consultant, Associate Teacher Role
Mrs. Dorothy Madison	Consultant, Continued Professional Study
Mr. Arden Moon	Associate Teacher Role

Dr. James Page	Consultant, Media Specialist Role
Dr. Chandos Reid	Consultant, Media Specialist Role
Dr. Alton R. Stine	Consultant, Resourced Teaching
Dr. Vera C. Weisz	Consultant, Associate Teacher Role
Mr. Gary A. Woditsch	Consultant, Resourced Teaching

SECTION IX

EVALUATION, PROGRAM DEVELOPMENT, AND MANAGEMENT

Behavioral Science Elementary Teacher Education Program

Michigan State University

1968

SECTION IX

EVALUATION, PROGRAM DEVELOPMENT AND MANAGEMENT

INTRODUCTION

The implementation of the Behavioral Science Teacher Education Project will demonstrate a significant attempt to radically alter, and make more effective, the preparation of elementary school teachers. Consistent with this radical approach to teacher education is the recognition that traditional and outdated modes of administration are inappropriate. The Behavioral Science Elementary Teacher Education Project (BSTEP) requires the implementation of a newer more responsive, adaptive, and functional administrative model.

The encouragement of innovation is best done in an atmosphere free of the rigid constraints associated with historic management models. Therefore, it appears reasonable to develop a different concept of management which can encourage rather than inhibit the creative behavior of persons associated with the project. A "quantum leap" in the concept of management must also be made if the output from the organization is to be continually relevant to the goals of BSTEP at each succeeding point in time.

The traditional administrative model is generally perceived to be rigid and inflexible and administrators are often regarded as inhibitors rather than facilitators of constructive change. Throughout the course of organizational history, the term management has carried a connotation of control. Managers have been persons whose primary responsbilities have included control over the operational aspects of the organization. However, the nature of control is such that emphasis on this aspect of management would be detrimental to the success of BSTEP. If most effective controls are accomplished through the construction of stringent barriers and development of rigid operational guidelines, then the traditional management--control model is quite inappropriate to the accomplishment of the dramatic improvement in teacher education being sought by BSTEP.

It should be understood that the management model developed for BSTEP is exceedingly complex. The essential elements of administration include responsibility, accountability, and a hierarchial relationship. Unfortunately these agonizing elements of organization cannot be wished away. The management model proposed for BSTEP is designed to be especially adaptive, responsive, and vital in meeting the needs of the goals of the organization. Personnel assigned management tasks in BSTEP must be held accountable for effectively performing the task and the responsibility which they hold must be fully recognized. Yet within this context they must have broad freedom, especially within their area of expertise, to perserve a maximum of flexibility and independence not associated with the traditional bureaucratic model of administration.

Administration, by its nature, is concerned with assisting an organization to follow existing patterns to existing goals; in short, administration is a maintenance function. Organizations, including educational ones, have too often equated the leadership role with administrative role. If leadership consists of assisting an organization to follow new routes to new goals, then the equation, leadership equals administration, is inadequate.

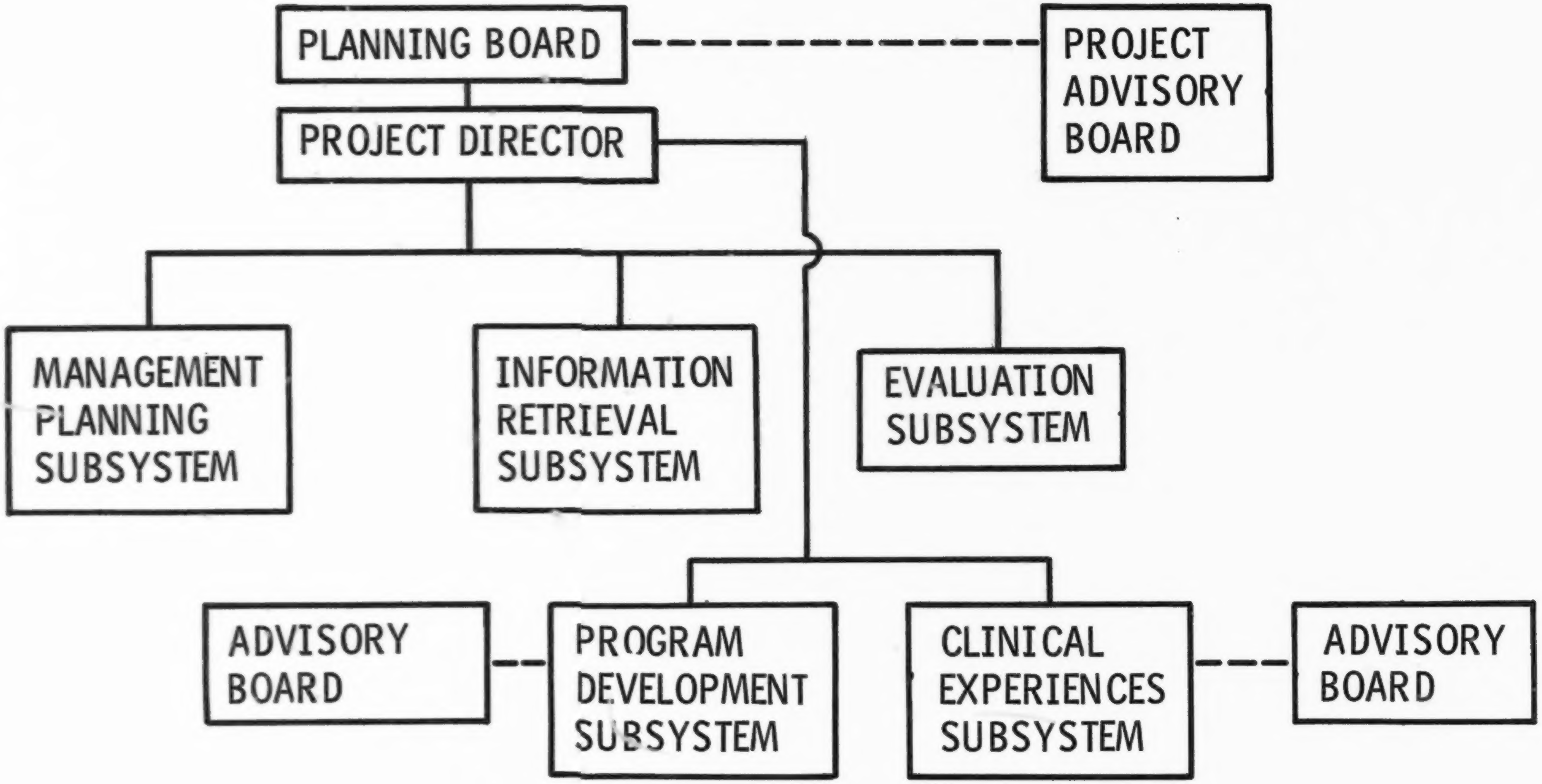
The BSTEP organization is outlined in Figure IX-1. As conceived, the organization consists of two units carrying operational responsibilities:

1. Program Development, and
2. Clinical Experiences.

In addition consultative services are provided by three staff offices:

1. Evaluation,
2. Information Retrieval, and
3. Management Planning.

FIG. IX-1


PLANNING BOARD
PROJECT ADVISORY BOARD
PROJECT DIRECTOR
MANAGEMENT PLANNING SUBSYSTEM
INFORMATION RETRIEVAL SUBSYSTEM
EVALUATION SUBSYSTEM
ADVISORY BOARD
PROGRAM DEVELOPMENT SUBSYSTEM
CLINICAL EXPERIENCES SUBSYSTEM
ADVISORY BOARD

More complete descriptions of these components follow at a later point in this section of the report.

It should be noted that the emphasis in this organization is on planning. Planning, by its very nature, is a leadership function in that it continually forces an organization to examine its operations and to seek alternatives which hold higher promise for objective fulfillment. Particularly during the early stages of BSTEP, when the organization must have the flexibility to evolve quickly into a viable teacher education organization, the emphasis must not be on the administrative structure. This is not to say that administration does not have its place in providing stability to the organization. As conceived, the BSTEP subsystems would be "administered" by administrative assistants responsible to the subsystem director. Their responsibility would be to serve the maintenance functions of program operations once they were planned and operational. Secondly, they would be responsible for adopting subsystem operations when planning activities indicated that changes were required to improve program operations. However, no overarching network of these administrators would exist. Coordination would be accomplished through a planning network composed of subsystem and project directors.

The operation model of BSTEP as proposed for this project has other characteristics which might be considered unique. First, BSTEP could be much more accurately characterized as a flat rather than a tall organization. That is, the hierarchial relationship among components of the organization is minimized. A number of advantages for this kind of organization result. For example, a collegial relationship is encouraged whereas a tall organization tends to emphasize differences in status among members of the organization. In addition, a flat organization is generally more responsive to the need for change because there are fewer levels through which decisions must pass in order to become operational. It could also be noted that communication tends to be more rapid in a flat organization than in a tall organization. Finally, a flat organization tends to encourage more interaction among the components than a tall organization.

Particular attention should also be paid to the role played by advisory boards. Each of the three advisory boards are placed at a carefully determined point in the organization to facilitate the responsiveness of BSTEP to real world problems. As a result, the entire system is designed to be able to react quickly and appropriately to external imperatives which impact teacher education.

The planning board is a particularly significant decision making body. The project director and director of each subsystem comprise the planning board. As a result, the director of each subsystem will have a significant voice in the development and thrust of the entire project. Thus, the management of the entire system is conceived to be a team effort.

The project director holds a key role in the organization, and he must fulfill the major leadership role within BSTEP. In addition, the project director will be the executive officer of the planning board and he will carry ultimate responsibility for the entire project. The project director will have primary responsibility for the appointment of project staff. In addition, the staff will be accountable ultimately to the project director.

The planning board also holds a critical role in BSTEP. Its duties and responsibilities are highly significant. It will be the responsibility of the board to develop general policies under which the project will function. In addition, the planning board will be responsible for the development of the general goals[1] of the project and it will also be responsible for development of general project objectives.[2] In the writing of project objectives, the Planning Board must be cognizant of the necessity of phrasing objectives in a fashion to permit evaluation. In addition, it will be the duty of the planning board to establish a priority among the general objectives of BSTEP. Furthermore, it will be the responsibility of the planning Board to allocate resources so that each subsystem can carry out its tasks effectively. Finally, it will be the responsibility of the planning board to resolve conflicts which might arise among subsystem operations.

---

[1] In this context, the term GOAL refers to a statement of "What the organization will seek to become or achieve."

[2] The term OBJECTIVE refers to the finite steps the organization plans to take in the process of "becoming or achieving." Objectives by their finite nature are evaluable. They are achieved at a moment in time which can be determined with appropriate instrumentation.

The subsystems hold some common duties and responsibilities. For example, each subsystem will be responsible for the development of specific objectives relevant to the performance of the task of that subsystem. In addition, it shall be their responsibility to establish a level of priorities among the objectives. It will also be the responsibility of each subsystem to develop its specific objectives so that they complement and are not in conflict with the general goals, objectives, and policies established by the Planning Board. Subsystem directors must also bear responsibility for staffing subsystem positions.

Three advisory boards would function at various levels within BSTEP. The Project Advisory Board would be directly responsible to the Planning Board. It would be the responsibility of the Project Advisory Board to make recommendations with respect to the entire project. The Project Advisory Board might include representatives from such groups as the State Department of Education, selected Intermediate Offices, State Educational Associations, Dean of the College of Education, Clinical Teachers, Clinical Student Teachers, Pre-clinical students, Local School District Officials, representatives from other colleges in the University, and other significant groups.

A Clinical Experience Advisory Board (CEAB) will also be established. It will be composed of representatives from such groups as clinical supervisors, students in residence, local school officials, supervising teachers, and others. It will be the responsibility of the CEAB to advise the director of the Clinical Experience Subsystem on matters relating to the increased effectiveness of this subsystem. The CEAB would be utilized as a sounding board for clinic plans as well as a feedback unit for evaluation.

A Planning Development Advisory Board (PDAB) will also be established. This advisory board will be composed of representatives from such groups as people who have completed their student teaching, clinic teachers, students preparing for student teaching, a representation from the State Department of Education and the Director of the Program Development Subsystem.

The primary purpose of each of the advisory boards is to make it possible for each subsystem, and for the project as a whole, to not only relate, but to adapt, to the rapidly changing conditions in the real world. It should be noted that the functions of the three advisory boards do not overlap. Each advisory board holds a significant position within the entire operation.

The following persons developed the management plans included in this section:

Dr. James E. Heald	Coordinator; Management
Dr. David C. Smith	Coordinator; Management
Dr. Bruce D. Cheney	Elementary Intern Program
Dr. W. Robert Houston	Program Development
Dr. Nicholas F. Rayder	Evaluation
Dr. Gary Smith	Information Retrieval; Evaluation

MANAGEMENT-PLANNING SUBSYSTEM

A Management-Planning Subsystem is an unusual, but vitally necessary, adjunct to any educational organization. The presence of such a subsystem within BSTEP is an obvious measure of a desire to have the entire program remain free from the rigidity imposed by the more common types of administrative networks.

CONTRIBUTIONS TO THE SYSTEM

With each of the other four subsystems being managed by persons whose professional expertise resides in areas other than management, assistance in understanding and utilizing management tools developed by management science is required if operating efficiency is to be maintained at a continuously high level. The Management-Planning Subsystem is conceived as an organization capable of providing assistance to the directors of the four other subsystems, the Planning Board, and the Project Advisory Council in the areas of systems planning, systems development, and systems analysis. It would be expected to assist BSTEP in:

1. Estimating and clarifying the perameters of program plans,
2. Developing a systems analysis of potential alternatives,
3. Estimating the potential consequences of alternatives,
4. Designing administrative and communication networks,
5. Assisting in the preparation of logistic support plans,
6. Developing and assessing operational relationships among subsystems,
7. Evaluating and revising the administrative operation of the program's organization, and

8. Directing, with the assistance of the evaluation subsystem, an annual program audit designed to measure the accomplishment or movement toward the accomplishment of program goals and objectives and thus facilitating continuous evaluation.

The manner in which the above kinds of contributions are employed by the total system are illustrated in the accompanying paradigms which convert program ideas into program operations, Figures IX-2 and IX-3.

RELATIONSHIP OF THE MANAGEMENT PLANNING SUBSYSTEM TO OTHER SUBSYSTEMS

The Management-Planning Subsystem is conceived as being a staff-service organization which performs its major functions largely through processes of consultation. In the absence of a traditional over-arching administrative network, and in the likely absence of professional managers serving as directors of the various subsystems, the responsibility for efficient operations must largely reside with the Management-Planning Subsystem. A complex administrative organization was omitted by design in order that the entire program could be free, particularly in its early stages, to respond to forces which have historically shaped teacher education, without the necessity of undergoing the tedious and painful task of revising or reordering cumbersome administrative machinery. However, increasing the responsiveness of the teacher education program through the omission of an administrative network must not result in inefficient operations. The Management-Planning Subsystem must keep management expertise available to assist the operating units in developing efficient and effective organizations for accomplishing program missions. Those subsystem directors who utilize the consultative services of the Management-Planning Subsystem may share responsibility for the program operations with the management-planning group. Those who do not bear alone the responsibility for operational efficiency.

FIG. IX-2

Conceptualization of the Role of the Management-Planning Subsystem in the Development of Program Plans

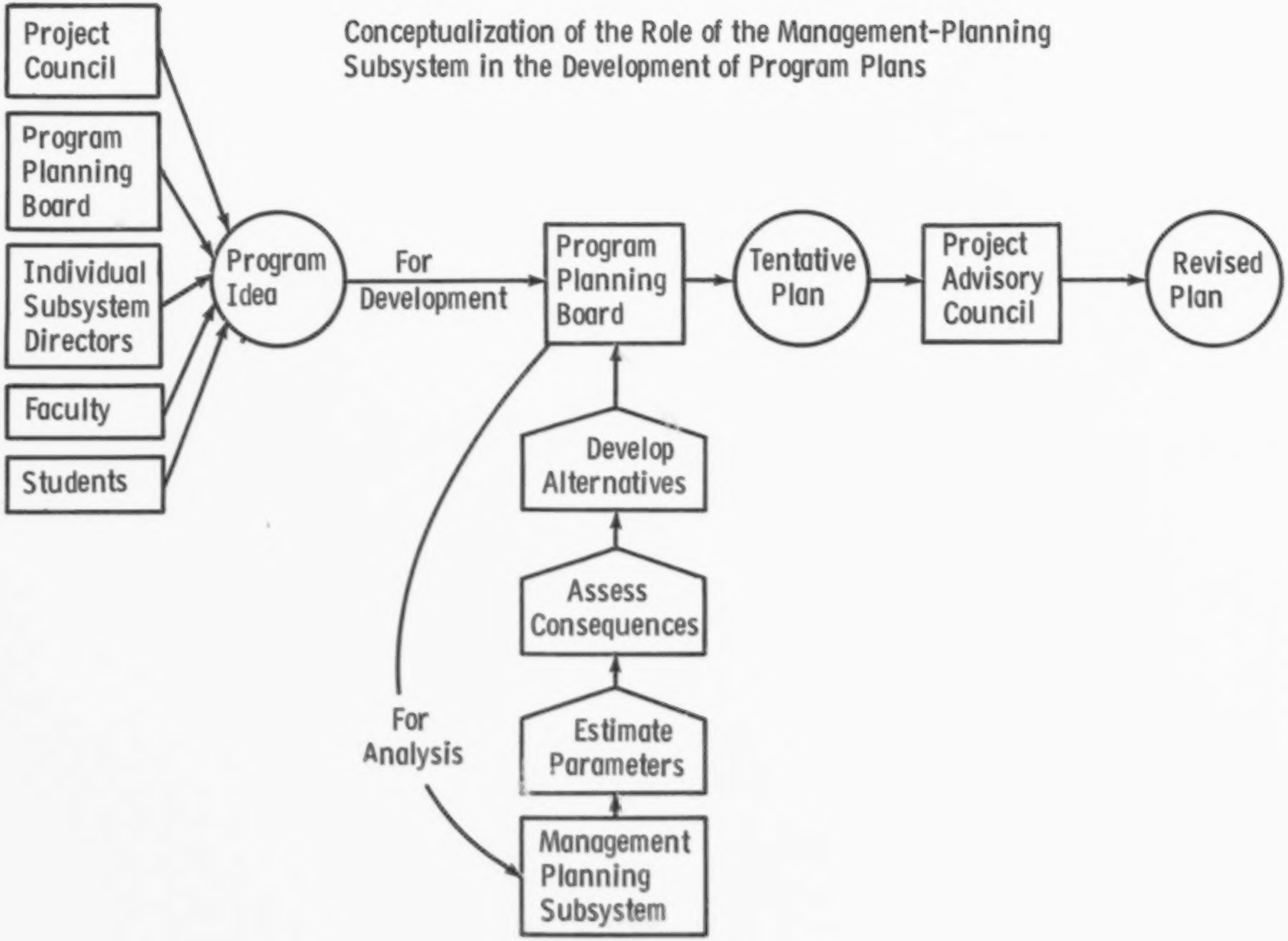
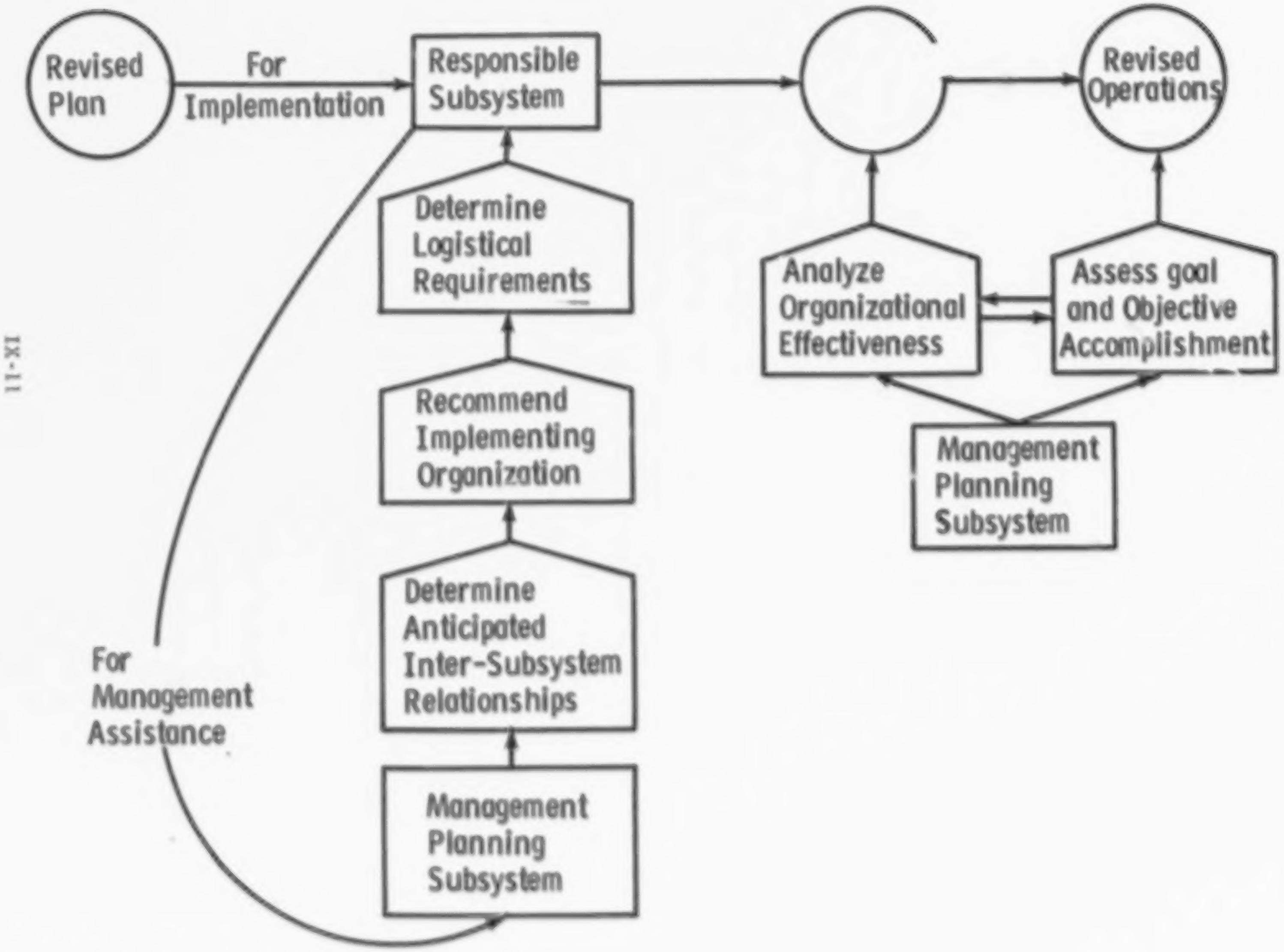


Figure IX - 3
Conceptualization of the Role of the Management-Planning Subsystem in the Process of Converting Program Plans into Program Operstions


Revised Plan
For Implementation
Responsible Subsystem
Revised Operations
Determine Logistical Requirements
Recommend Implementing Organization
Determine Anticipated Inter-Subsystem Relationships
Management Planning Subsystem
For Management Assistance
Analyze Organizational Effectiveness
Assess goal and Objective Accomplishment
Management Planning Subsystem

This subsystem is not responsible for developing goals, for developing objectives, nor for developing plans and strategies which will accomplish goals and objectives. Nevertheless it is responsible for assisting all operational units in the process of planning and development. In addition, assistance will be provided to subsystem administrative assistants in the implementation and management of program operations which were designed through planning processes to accomplish stated project or subsystem objectives.

ESTABLISHING THE SUBSYSTEM

Following employment of the directors of the five subsystems and the BSTEP Director, the Management -Planning Subsystem should be among the very first to be staffed and made operational if the subsystem is to provide appropriate consultative service regarding processes for establishing organizational goals and objectives of each subsystem. This information needs to be available to other subsystems during the very early stages of their life-span in order to coordinate the entire program. Each subsystem director should be given a relatively free reign in choosing his staff and professional personnel. In addition to the selection of appropriate personnel, the establishment of the Management-Planning Subsystem will require the early securing or development of appropriate computer programs to handle PERT, PERT/COST, PPBS, and other management-planning tools which seem appropriate to BSTEP. Access to computers and data processing centers is also a requirement which must be fulfilled very early in the life of the subsystem. Wherever possible a computer link should be available for use by subsystem personnel. This link could be the one used by the information retrieval subsystem.

ESTIMATED PERSONNEL REQUIREMENTS

For a teacher education program involving five to six hundred students annually with one hundred graduates per annum, it is estimated that a Management-Planning Subsystem would require the following numbers and kinds of personnel:

1. Director - (Specialist in organizational planning and systems development),
2. Administrative Assistant,
3. Administrative Interns,
4. Systems Programmer, and
5. Secretarial Assistant

BSTEP should also serve a training function. This subsystem could employ one or more graduate assistants interested in the management of teacher education projects for the purpose of assisting in the specialized training of graduate students. Internship arrangements should also be developed. Students from departments of administration interested in the administration of higher education institutions would seem to be the most appropriate kind of personnel to place into the training program. Expected outcomes would include expanded competence in systems development, analysis and planning.

PROCEDURES FOR MODIFICATION OF THE SUBSYSTEM

Requirements for revising the function of the subsystem will largely come in the form of feedback from other subsystems who receive services from it. The most common feedback will be informal and will be received by the director from other directors in meetings of the Planning Board. In addition, the type of requests received from other subsystems is likely to be indicative of the kinds of services required and available. Such requests should serve as a stimulus for the revision of the Management-Planning Subsystem in a fashion which would guarantee that it is responsive to the needs of the other subsystems.

In addition to informal feedback which can serve as stimulus to subsystem revision, at least two formal means should be employed to assist the subsystem to evaluate its own effectiveness. In a continuous manner, the evaluation subsystem should provide assistance in measuring the degree to which the Management-Planning Subsystem has been capable of achieving its objectives. In the process of developing each subsystem, objectives would be made explicit, and those statements would serve as the primary criteria against which an evaluation would be performed.

The Management-Planning Subsystem should also be evaluated on a periodic basis by an external agency. The evaluating agent should be an expert in management and planning techniques. The evaluation of the subsystem would consist not only of assessing the degree to which its objectives were achieved, but the agent would also assess the consultative assistance which had been received by the other subsystems from the Management-Planning Subsystem with respect to its appropriateness.

PERSONNEL IMPROVEMENT PROGRAMS

Personnel comprising the manpower of the Management-Planning Subsystem must be kept abreast of new developments within management science. To achieve this, budgets should make provisions for both the formal and informal in-service training of subsystem personnel. Budgets should provide for the attendance of subsystem personnel at conferences, conventions, and workshops across the country devoted to management science techniques. In addition, a provision should be made to equip the subsystem offices with journals, appropriate to the science, and adequate provision should be made for the purchase of books and other materials related to this field. Subsystem personnel should also be alert to special programs conducted by major universities and agencies of the federal government which relate to new developments of management and planning techniques.

When graduate asistants are employed, the nature of the training should be jointlyplanned between subsystems personnel and academic advisors from the students' major academic area. The nature of the planning should include the development of task descriptions, the nature of supervision, and the nature of a system to evaluate his learning and effectiveness.

FACILITIES AND EQUIPMENT REQUIREMENTS

With the exception of having computer linkage available, no other special requirement seems necessary to launch the Management-Planning Subsystem. Three offices plus housing space for secretarial assistance and graduate assistants should be sufficient. These facilities should be in reasonable proximity to the other subsystems in order that consultation can be made readily available on short notice. Computer programs of the kinds already mentioned should also be a requirement, and should be sought out for development very early in the process.

PROGRAM DEVELOPMENT SUBSYSTEM

The Program Development Subsystem of the Behavioral Science Teacher Education Project is the organizational entity responsible for developing and ultimately delivering the non-clinical experiences of the teacher trainees. The major portion of the cognitive experiences are delivered through the subsystem in the form of single purpose, instructional modules. In effect, each module is explicit, carries a single behavioral objective, and has the capacity to be analyzed, revised, or eliminated. Clusters of modules, centered around similar objectives, can also be developed, implemented, evaluated, and redesigned. The sequence of the instructional modules can also be shifted and assessed. The mechanics of the Program Development Subsystem revolve around:

1. The development of instructional models,
2. The ordering of the models into clusters and appropriate sequences,
3. The delivery of modules in instructional form, and
4. The assessment, revision and reordering of modules for delivery in subsequent cycles.

Specifically, The Program Development Subsystem is responsible for:

1. Determining the type, kind, and number of instructional modules to be developed,
2. Relating instructional modules to appropriate behavioral objectives,
3. Securing competent persons to develop the content and delivery method of each instructional module,

4. Developing instructional delivery systems for the presentation of modules,

5. Determining priorities and allocations of resources assigned to that program development function,

6. Reviewing and implementing program changes which have been indicated by evaluation feedback,

7. Assessing and evaluating major shifts in program emphasis which need to be reflected in subsequent instructional modules,

8. Determining, reviewing, and revising the number of program tracks required to meet individual student needs, backgrounds, and aspirations,

9. Setting and continuously evaluating the criteria for student entrance into the program to improve inputs to teacher education,

10. Determining the kinds of baseline data to be collected about incoming students,

11. Coordinating pre-service and in-service curricular elements, and

12. Developing, in conjunction with a media center, appropriate instructional materials.

RELATIONSHIP OF THE PROGRAM DEVELOPMENT SUBSYSTEM TO OTHER SUBSYSTEMS

Ad indicated, the primary purpose of this subsystem is to develop and to deliver an appropriate instructional program. The resources of the Evaluation Subsystem must be heavily involved in determining the effectiveness of the various phases of the instructional program in accomplishing the program goals and objectives. The Evaluation Subsystem must provide consultative assistance during the development of behavioral objectives for instructional modules in order that the objectives, as written, contain the essential elements which permit subsequent assessment. In addition, The Evaluation Subsystem should provide feedback on the effectiveness of the ordering and the clustering of instructional modules with such feedback in a form which would permit the Program Development Subsystem to revise, reorder, and recluster the experiences-so as to demonstrate a capacity for continuous evaluation. Figure IX-7 in the Evaluation Section, conceptualizes in greater detail the relationships which exist between the two subsystems.

Input from the Clinical Experiences Subsystem, provided in conjunction with the staff services of the Evaluation Subsystem, provides assistance in determining program effectiveness in different environments. Findings from the clinical experiences of students must be considered in determining the nature of cognitive models prepared by the Program Development Subsystem. It should be noted at this point that graduates from BSTEP, teachers and administrators from public schools providing clinical laboratories, clinical professors, and other university personnel associated with the Clinical Experiences Subsystem will be utilized in planning and delivering instruction. The utilization of professional personnel in both clinical and pre-clinical instructional areas of the project is a major factor in encouraging regeneration and in extending the development of outstanding teachers and university leaders.

The Program Development Subsystem utilized the consultative services of the Management-Planning Subsystem in developing, assessing, and revising the administrative processes thus facilitating the development of instructional models. The delivery of cognitive modules through the processes of instruction involves instruction. The development and implementation of organizational features to provide for instruction should also be facilitated through the utilization of the management expertise of the Management-Planning Subsystem.

The Information Retrieval Subsystem also serves the Program Development Subsystem by providing the storage and retrieval capacity required by the very nature of the instructional modules. The two subsystems must cooperatively plan the appropriate means for converting modules into a form which permits storage and ultimate retrieval of data in the most usable form. The retrieval system, as cooperatively planned, must also provide for the purging of the retrieval system at any time modifications are made in the nature or ordering of the instructional modules.

The development of subsystem objectives and the program operations related thereto require many kinds of inputs. Not the least of the required information is that which is provided by the Program Development Advisory Board. The board is composed of persons removed from the project operations but impacted by them, can provide much advice and valuable feedback concerning the effectiveness of subsystem operations, the appropriateness of modules, their clustering and sequencing, appropriate methods of delivery, and the establishment of priorities among program alternatives. All seem to be appropriate areas about which an advisory board could present suggestions for consideration by the subsystem director and his staff.

ESTABLISHING THE SUBSYSTEM

The development of specifications for the Behavioral Science Teacher Education Project by Michigan State University has included the development of an initial set of instructional modules which have been punched onto data process cards and inserted into a computer-operated information retrieval system. Copies of modular printouts have been reproduced in preceeding sections of these specifications. The total program has been reproduced onto several computer tapes by the computer laboratory of Michigan State University and any institution could obtain a program deck of modular data cards readily reproduced from these tapes which in turn could be reprogrammed for computers located at other institutions. Thus, an up-to-date, explicit description of the initial program modules is available upon request.

Institutions accepting the teacher education concept as described in these specifications must nevertheless establish a Program Development Subsystem capable of expanding, revising, and ordering the already developed instructional modules in a fashion which best reflects their own philosophy of teacher education. The development of this type of system requires, in addition to a subsystem director, the acquisition of a staff including program writers from all curricular areas as well as persons with specific skills in communications, instructional materials, and media. Translating curricular ideas into viable, aesthetically pleasing, manageable instructional modules requires special competencies, a knowledge of technology, and familiarity of the latest gadgetry in hardware and software. From the beginning, the personnel in the Program Development Subsystem must have access to such resources.

The operating subsystem by which the skills of these personnel can be brought to bear in the process of initiating and carrying forward the delivery of instruction can be facilitated through the use of the staff services of the Management Planning Subsystem. The expertise from this subsystem staff should be utilized at the very first stage of subsystem development in order, from its inception, it be organized in a fashion to guarantee the highest efficiency in all subsystem operations.

Furthermore, the Program Development Advisory Board should also be determined at the earliest possible date. The involvement of these external agents in the initial planning and implementation stages of the subsystem would do much to develop a feeling of total meaningful participation among the membership of the advisory board.

ESTIMATED PERSONNEL REQUIREMENTS

For a program graduating one hundred students per year and having a clinical experience centered in several public school systems, the following personnel needs are identified for the Program Development Subsystem:[1]

1. Director (specialist in teacher education or curriculum innovation
2. Administrative Assistant
3. Professionals engaged in delivering the instructional modules
4. Professionals engaged in the development of instructional modules (the assignment of these people would vary from time to time and would include over long periods of time content specialists from all disciplines)
5. Media Specialist
6. Photographer
7. Communications Specialist
8. Artist
9. Secretarial assistants
10. Keypunch operators
11. Systems Programmer

---

[1] The staffing requirements are predicated upon the assumption that the initial instructional modules as developed by Michigan State University would be utilized during the first cycle of operations, and that the subsystem would not bear the responsibility for the repetitive development of modules already prepared.

8

PROGRAM DEVELOPMENT IN OPERATION

Program development is accomplished by several means: revision of current modular experiences, input of new ideas or modes of inquiry from scholars in various content areas, the addition of new program tracks, and revision in the clustering and sequencing of instructional modules.

A sophisticated media center is also an important dimension of the Program Development Subsystem. The media center personnel should assist in the translation of instructional ideas into effective teaching materials. The media center should be on campus so that it would be readily available to both staff and students. The media center is visualized as serving three primary functions: the preparation of materials to be used in the program, as a comprehensive resource center of instructional materials, and as an area for instruction in media techniques.

The media center personnel would be responsible for assisting in the development of material to be used in the delivery of the instructional program. It would be the responsibility of the media center to serve as a laboratory for students learning the use and capacity of the center. Third, it would be the responsibility of the media center to package and store simulation materials developed and used in BSTEP. Fourth, it would be the responsibility of media center personnel to consult with program development staff with respect to the communication of ideas through the selection of proper media, message delivery, and format.

Periodic review and evaluation of the elements comprising instructional components, including modules and the relationship of the modules to the total instructional program, is to be made by the Program Development Subsystem in conjunction with instructors, staff personnel from the Evaluation Subsystem and the Management Planning Subsystem, and with the advice and council of the Program Development Advisory Board. Students reaction and achievement, the relationship of the various components to general outcomes and the specific objectives, the status of revision-needs of the total subsystem and its operational programs would be considered legitimate aspects of the continuous evaluation effort. While constant development of instructional modules and systems to deliver those modules would permeate all aspects of BSTEP,it is expected that the analysis of the components and their interaction in the instructional processes would be the major elements in keeping the program viable.

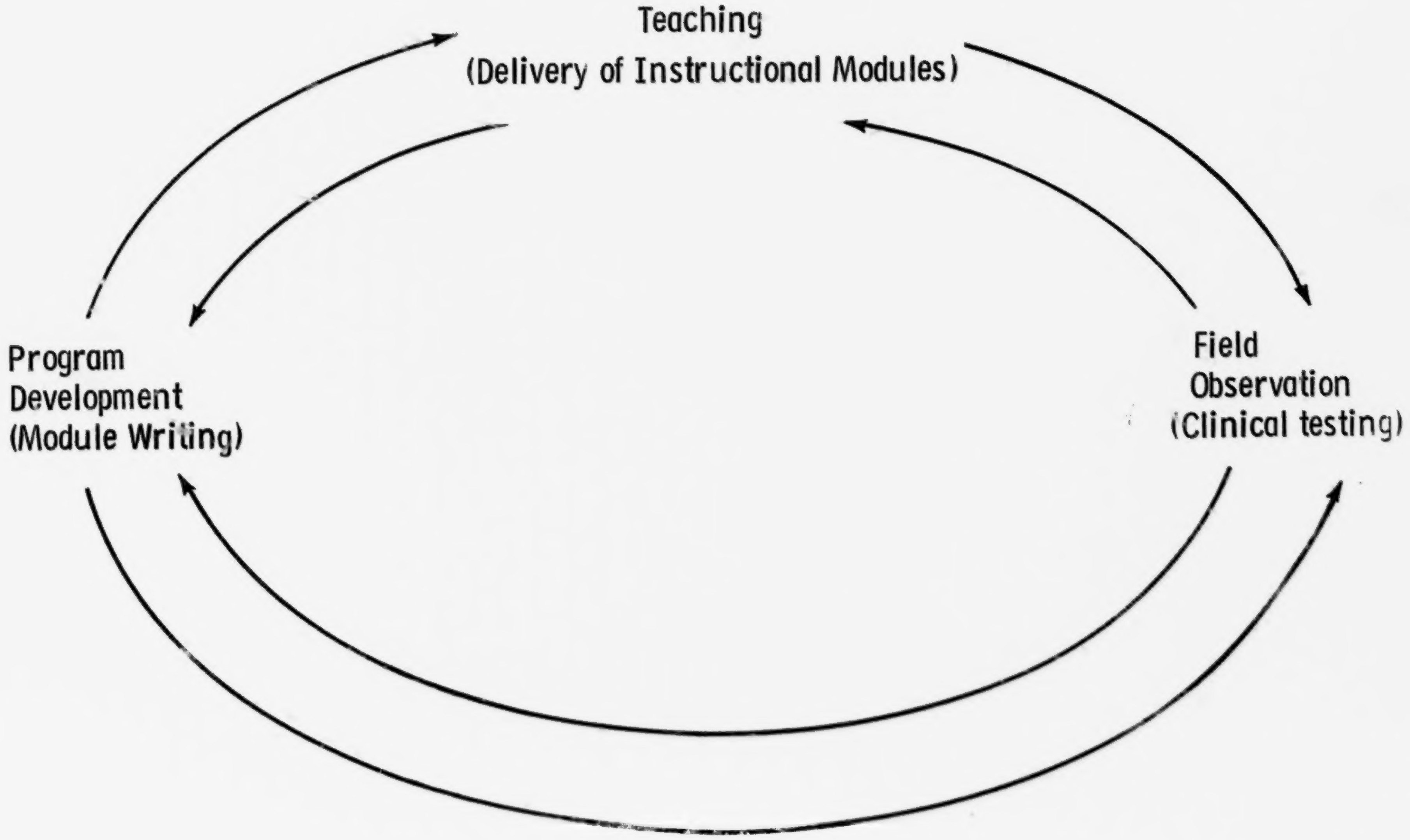
When possible, rotation between persons engaged in delivering instructional modules, the writing of instructional modules, and the directing of clinical experiences should be encouraged. With those instructors from Human Learning and Professional Use of Knowledge components, this is particularly significant, for they must maintain constant feedback from field experiences to optomize the content and scope of their work with students. To provide the feedback data-base for development of the experiences for which they are responsible, professors must have the opportunity to follow-up their instruction with reality testing in the field. As the result of this kind of testing, materials and experience modules would likely be modified or redesigned. This cyclic model of curriculum revision is illustrated in Fugure IX-4 which follows.

Thus, as each Professor utilizes the approach identified as clinical style, he becomes a model for the practitioner and the prospective teacher to observe, and possibly adopt, a given *modus operandi*. Further, as the consequences of the program are acted on by the trainee, the field environment provides myriad inputs which provide the base for more refined and sophisticated output in the instructional setting. Thus, the instructor and program developer become integral partners in assessing and contributing the most significant inputs from the field into the main stream of program development. From these experiences can come the collection and refinement of simulated episodes, written vingettes, filmed and taped records, and other types of records and simulations which provide problem-solving settings for teacher trainees.

A second needed input comes from researchers and scholars from all fields of endeavor. The rapid development of new knowledge, methods of gathering data, and of solving problems makes it imperative that the program elements be as

FIG. IX-4

Curriculum Revision Cycle



current as possible. This is not only true for the academic areas related to General Education and Scholarly Modes of Knowledge, but also to the professional areas which draw from the behavioral sciences. Consultants, who are working on the frontiers of Man's knowledge in various disciplines, periodically will work with the program development team to assure an adequate current data base. Alternate modular experiences need to be designed to meet the needs of individual students who have different personality characteristics, varying ambitions, and different backgrounds. In the present model, alternatives are outlined for teaching specializations in various subject areas, and with different age groups. These need expanding, not only in number of alternate modules in those two dimensions, but in other dimensions including student personal characteristics and the potential teaching environment into which the student may enter. Thus, a major focus of program development would be to increase the channels through which students progress in order to provide multiple routes and respond to individual modes of study. Further work on individualization of the program must be developed by teacher training institutions accepting this concept of teacher preparation.

As indicated, an Information Retrieval Subsystem is an absolute requirement if instructional program descriptions are to be retained in explicit and current form. As new modules are developed they would be inserted into the IR Subsystem so that at any time up-to-date descriptions of the total program or any part of it may be retrieved rapidly and in immediately usable form. The filing terms used in the information retrieval system should continually be revised to increase their usefulness and effectiveness. As initially conceived the process should employ the ERIC system of descriptors (see ERIC THESAURUS). The ERIC system would also be used in providing up-to-date information on each of the instruction topics. Some modification in ERIC would need to be made so that the retrieval potential through the use of descriptors is possible.

Modular file terms could be used by instructors and by program developers to cross reference their ideas with others in the program. For example, the instructor in Professional Use of Knowledge and social studies may wish to know the kinds of experiences students have had vis a vis economic systems and balance of payments so that he may draw upon student's past experiences as he works with the development of materials for primary children in the field of economics. Overlapping content and gaps in the program can be more readily recognized through analysis of modular file terms.

PROCEDURES FOR MODIFYING THE SUBSYSTEM

A complex undertaking such as herein described requires considerable resources. It too, as every other subsystem, must be readily modifiable to meet unforeseen needs or to improve operational efficiency. The Management Planning Subsystem, through its consultative services and through utilization of management tools and techniques, can provide systems analysis assistance which would be broadly useful in modifying the program operations. In addition, the Evaluation Subsystem should provide evaluative information of a sort to stimulate program modification.

Information from the Program Development Advisory Board and formal and informal feedback from directors of clinical experiences, from module writers, from professors delivering instructional modules, from students, and from the subsystem staff are additional inputs which must be considered as the subsystem seeks to modify its operations.

FACILITIES AND EQUIPMENT REQUIREMENTS

Basic to program development is the easy access to information retrieval systems. Although described in detail in another section, its importance must be reinforced at this point. Such an information retrieval system requires an adequate computer with storage capacities sufficient to the task of this project.

The development of materials used in the preparation and delivery of instructional modules requires access to a whole host of equipment: cameras and projectors, overhead projectors, dry-mounting processors, sound recording equipment for classroom and individual use, motion pictures, artists supplies and equipment, media laboratories for the development of new materials, computer-assisted instructional terminals, instructional materials centers to provide access to commercial materials, video tape capacity for use in simulation experiences, and a host of other supplies and equipment required of this type of instructional system. The location of staff offices should be in close proximity to media and material specialists.

INFORMATION RETRIEVAL SUBSYSTEM

The application of a sophisticated Information Retrieval Subsystem is all but unknwn in teacher education. However in BSTEP, the Information Retrieval Subsystem is a vitally important element of the total project. Such a system is of major significance in preserving essential information which might otherwise be lost or unavailable when needed. The Information Retrieval Subsystem is also absolutely necessary in dealing with the myriad number of modules associated with a behavioral model of teacher education. In addition, this subsystem is designed to be a repository for critical information which would be of deep significance to other subsystems within the program. For example, other service oriented subsystems such as the Management-Planning Subsystem and the Evaluation Subsystem will also have occasion to call upon the services of the Information Retrieval Subsystem. The reader is directed to Section X in this report which treats the IR Subsystem in greater detail.

CONTRIBUTIONS TO THE SUBSYSTEM

The personnel in each of the other four subsystems should recognize a great need to organize and retrieve large quantities of information as quickly and efficiently as possible in order to facilitate decisions relative to the entire system and students within the program. As a result, the activities which take place within the system must be highly coordinated with the other subsystems so that each becomes an integral extension of the other. The activities taking place in this subsystem would be expected to assist the Planning Board and other subsystems in:

1. Facilitating rapid communication of critical data to all other subsystems in the program,

2. Serving as a repository for instructional behavioral modules developed within the project,

3. Generating progress chart for individual students based upon their performances in the modules.

4. Establishing a student record tape file to assist in the evaluation of individual student progress,

5. Establishing a Clinic Experiences Subsystem Data File for use in each Clinical Teaching Center (see description of Clinical Experiences Subsystem) and available to students, clinic teachers, and university personnel,

6. Serving as a repository for sociological, technological, and demographic data useful to the Planning Board, Management-Planning Subsystem, and the Clinical Experiences Subsystem,

7. Serving as a repository for baseline data to be used in various phases of the program,

8. Providing access to ERIC and similar information repositories for use in modifing and improving the modules in the program,

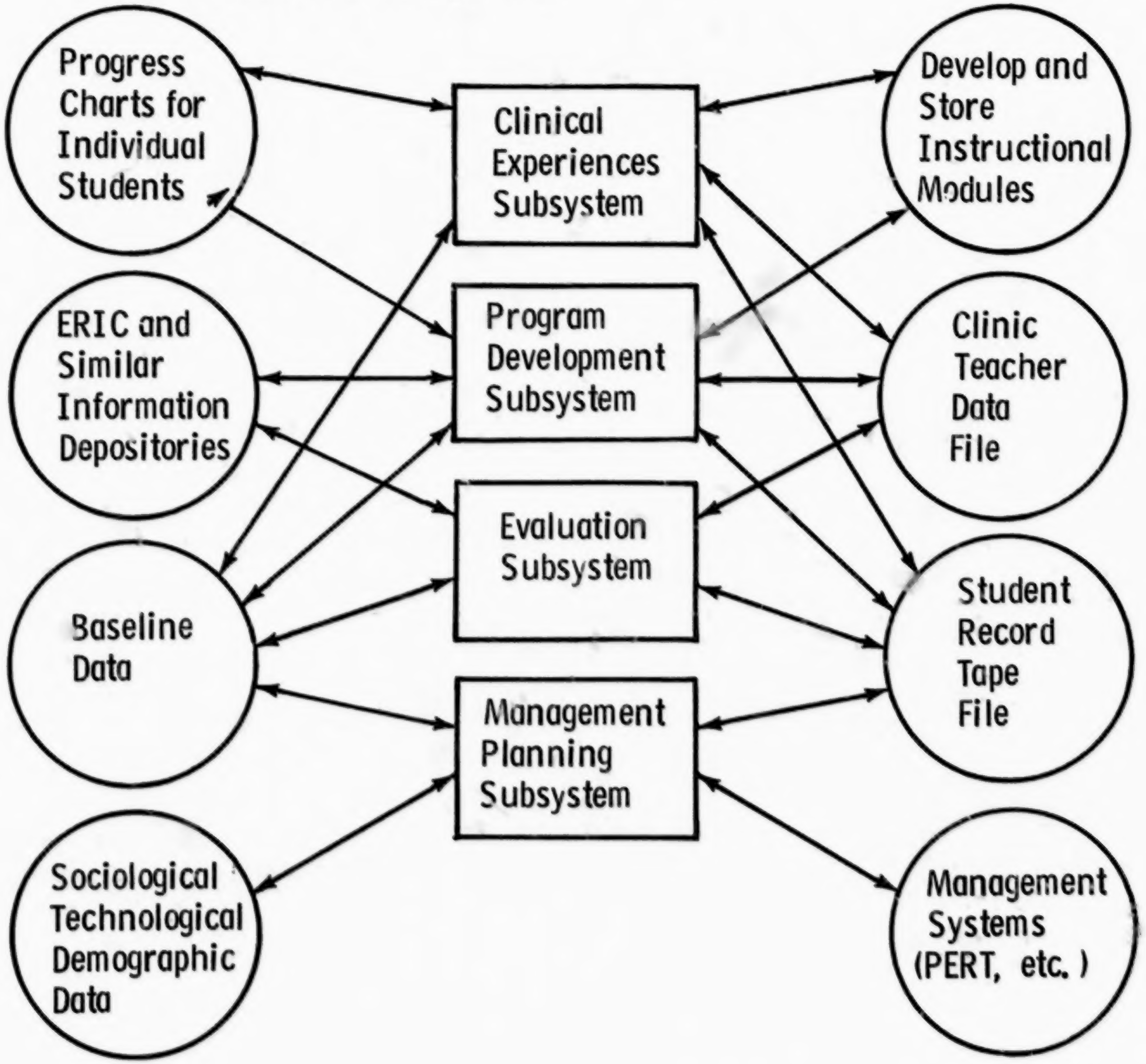
9. Applying models of statistical inference to increase the decision making capacity of project personnel relative to the progress of each student and the management of the project itself.

Each subsystem will be responsible for working closely with the Information Retrieval Subsystem relative to the nature, quantity, and form of the data to be collected. Each subsystem will be responsible for the initial collection of the data to be stored.

Figure IX-5 represents a conceptualization of the contributions of the information retrieval system to other subsystems. This paradigm illustrates the fact that the same data may be useful to more than one subsystem, even though it would obviously be relevant for different reasons. It also graphically illustrates the wide variety of data which would be rapidly available to any subsystem in BSTEP.

FIG. IX-5

Conceptualization of the Contributions of the Information Retrieval Subsystem to Other Subsystems


Progress Charts for Individual Students
ERIC and Similar Information Depositories
Baseline Data
Sociological Technological Demographic Data
Clinical Experiences Subsystem
Program Development Subsystem
Evaluation Subsystem
Management Planning Subsystem
Develop and Store Instructional Modules
Clinic Teacher Data File
Student Record Tape File
Management Systems (PERT, etc.)

RELATIONSHIPS BETWEEN THE INFORMATION RETRIEVAL SUBSYSTEM AND OTHER SUBSYSTEMS

The Information Retrieval Subsystem is seen primarily as a service agency whose major purpose is to provide significant data to other subsystems within BSTEP. The personnel in this subsystem would be responsible for assisting personnel in the Program Development Subsystem in developing a format for writing instructional modules. The nature of this assistance would be such that the instructional modules, prepared primarily by Program Development Subsystem, would lend themselves to efficient storage.

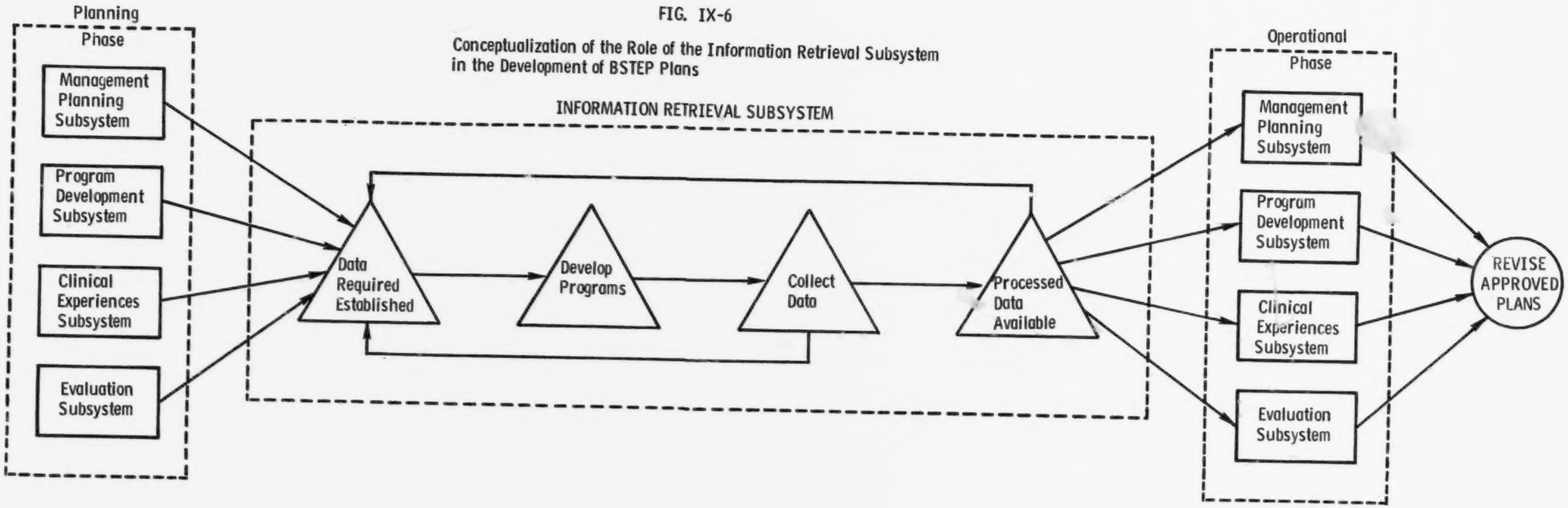
It is apparent that some information stored in the Information Retrieval Subsystem will be useful to the personnel in the Program Development Subsystem as well as to the Clinical Experience Subsystem. The information thus stored should facilitate a closer working relationship between on-campus personnel and personnel involved in the clinic setting. In turn, greater effectiveness in program development and in the evaluation of students in the achievement of behavioral objectives should result.

Attention should also be drawn to the fact that the personnel in the Information Retrieval Subsystem will find it necessary to work closely with the personnel in the Evaluation Subsystem. Such cooperation will be necessary in order to make efficient use of the capacity of the Information Retrieval Subsystem. It will also be desirable for the two systems to work cooperatively in the analysis of the data which will be collected.

The Information Retrieval Subsystem can also contribute to the effectivenss of Management-Planning Subsystem by providing hardware and assisting with the development of appropriate programs which will facilitate the processes of planning and coordination through the use of sophisticated management systems such as PERT, PERT/COST, and PPBS, as well as the development of new, computer-oriented management techniques.

FIG. IX-6

Conceptualization of the Role of the Information Retrieval Subsystem in the Development of BSTEP Plans


Planning Phase
Management Planning Subsystem
Program Development Subsystem
Clinical Experiences Subsystem
Evaluation Subsystem
INFORMATION RETRIEVAL SUBSYSTEM
Data Required Established
Develop Programs
Collect Data
Processed Data Available
Operational Phase
Management Planning Subsystem
Program Development Subsystem
Clinical Experiences Subsystem
Evaluation Subsystem
REVISE APPROVED PLANS

ESTABLISHING THE SUBSYSTEM

After the directors of the five subsystems have been appointed, the Information Retrieval Subsystem should be among the first to be staffed and be made operational if it is going to fully achieve its function as a service agency to other systems within BSTEP. Considerable lead time will be necessary in order for the personnel in the Information Retrieval Subsystem to acquire necessary hardware and render the system operational. It will also be necessary for the personnel in the subsystem to clearly understand the capacity and services which the Information Retrieval Subsystem can render. As a result, early in the life of the project, communication will be required between the personnel in this subsystem and the other subsystems. This will be necessary in order to insure that the personnel in all subsystems clearly understand the capacity and services which the Information Retrieval Subsystem can render. This subsystem should elicit from all other subsystems an indication of their needs relative to information storage and retrieval.

Figure IX-6 represents a conceptualization of the role of Information Retrieval Subsystem in the development of program plans. One of the reasons why it is highly desirable that the Information Retrieval Subsystem become operational early in the life span of BSTEP is that it should assist the project personnel in moving from a planning phase to an operational phase as rapidly as possible. This paradigm demonstrates that a high degree of interaction between this subsystem and other subsystems is necessary. It also suggests that the processed data available from the Information Retrieval Subsystem will contribute to the decision capacity of each of the subsystems and thus to the entire project.

It will be the primary responsibility of the director of the Information Retrieval Subsystem to establish the understanding and communication necessary for this subsystem to become operationally effective. In addition, the subsystem Director should be given wide latitude in the appointment of the personnel in this subsystem.

ESTIMATED PERSONNEL REQUIREMENTS

For a teacher education program involving five to six hundred students annually with one hundred graduated per anum, involving one clinical center of approximately six cooperating school districts, it is estimated that an Information Retrieval Subsystem would require the following kinds of personnel:

Director

Administrative Assistant

Computer Programmer

Secretaries

Key punch operators

At some point BSTEP should serve an additional training function by using the Information Retrieval Subsystem as a clinical experience for graduate students interested in developing an ability to relate information storage and retrieval systems to teacher education.

PROCEDURES FOR MODIFICATION OF THE SUBSYSTEM

Appropriate modification of this subsystem will be determined by the needs of, and feedback from, other subsystems in the program. The type of request received from other subsystems is likely to reflect the nature of the services required and available, as well as those that are needed.

At this point, a dialogue between the personnel in the Evaluation Subsystem and Information Retrieval Subsystem should be highly productive. It should provide a partial means both of assessing the effectiveness of the existing subsystems and also provide the feedback necessary to increase the responsiveness and effectiveness of this subsystem.

PERSONNEL IMPROVEMENT PROGRAMS

As stated earlier in this document, it is vitally necessary that personnel have an opportunity to remain abreast of the latest developments in their field. In like manner, personnel involved in the effort of this subsystem must be kept abreast of new developments in information retrieval. Therefore, it is necessary that budgetary allocation be made in order to facilitate the constant up-dating of the skills of subsystem personnel.

FACILITY AND EQUIPMENT REQUIREMENTS

It is obviously vitally important that this subsystem acquire the necessary hardware to carry out its mission. Especially in this subsystem, minimizing support and maximizing efficiency of a delay in the delivery in the vital data to other appropriate subsystems. It should be recognized that particular care will be necessary to provide for adequate space to house the hardware needed by this subsystem. Proximity of this subsystem to other subsystems will be highly desirable, though with adequate electronic equipment it may not be as absolute necessity.

A list, by item, of representative hardware follows:

Representative Hardware and Cost Estimates Lease*

Item	Input-Output Category	Manufacturer	Approximate Monthly Rental
1	Cathode Ray Tube	RCA Spectra 70/752	
		Raytheon DIDS-400	$190
2	Card Read Unit	Uptime Corp. Speedreader 400	
		Tally Dartex	$ 95
		IBM	$150
3	Paper Tape	Tally 700 wpm Transmitter, Receiver	$140
		Friden	$ 90
4	Magnetic Tape	Mohawk	$150
5	Touch-Tone Telephone	Bell Telephone	$ 30
6	Keyboard Terminals	IBM 1050	$125 to $300
		TT 33 ASR	$750 purchase
7	Optical Scanners & Optical Readers	IBM 1230 (Scanner)	$500
		Digitek (Scanner)	$700
		IBM 1428 (Reader)	$3000
		Recognition Equip. Co. (Reader)	$15,000
8	Microfilmer-Computer Interface	Stromberg-Carlson	$11,000
9	Microfilmer	Kodak Model 400	$2200 purchase
		Bell & Howell Microrecorder	$2800 purchase
	Microfilm Reader	Kodak Starmatic (Roll film)	$ 600 purchase
		Dietzgen Co. Model 4308 (Roll)	$ 300 purchase
	Microfilm Reader-Printer	Kodak Magnaprint (Roll, Jackets)	$1350 purchase
		3M Company Model 400 (Roll, Jackets)	$1100 purchase
10	Central Processor	IBM 360/Model 65	$56,000
		CDC 6500	$52,000

*Sources: "Annual Reference Section", Business Automation, September, 1968. pp. 65-185 and manufacturer's brochures.

THE CONTRIBUTION OF THE EVALUATION SUBSYSTEM TO THE TOTAL PROJECT

Evaluation suggests a reconsideration and re-examination of values. The value system of any individual or group will dictate the behavior of that individual or group. Although little is known about the value system of individuals or groups by direct, empirical measurement of those values, work in assessing values and their relationship to performance must continue.

Value systems are abstractions and are not amenable to direct measurement. A value system which presumes to rate or appraise another value system is trapped in circular reasoning. The consequences of a value system are neither right nor wrong, but simply valid or invalid consequences of its postulates. One would have to postulate a system of ethics in order to assess the "rightness" or "wrongness" of a value judgment or the consequences of that judgment.

Evaluation in BSTEP is not concerned with defining the highest ethical system for elementary school teachers. However, evaluation can play a major role by simply calling attention to some of the inferences and value judgments which may be implicit in the statements of goals or objectives which are made by one or more of the components. In this role, the evaluator is concerned with not only the real world of teachers and students, but is also essentially concerned with the value structure which is being generated by persons in the project. This is similar to Bridgeman's comment that to the extent which mathematics is concerned with real objects in the empirical world, then it is no longer mathematics.

A second major contribution of evaluation is to moblize the instruments and analytical techniques of the behavioral sciences in order to observe, measure and assess the overt actions of individuals or groups. These assessments permit us to draw inferences about a person's values, which are implied by his behavior. In this role, the evaluator is keenly sensitive to the real world of teachers and students, and to the difficulties of assessing this complex pattern of human interaction.

Since virtually all measurement is approximate, the observation and measurement of behaviors which are generated by any component in the project can only be approximate. This is similar to Carnap's concept of the degree of confirmation of some hypothesis by some piece of evidence.

Specifically, the Evaluation Subsystem will be engaged in activities such as:

1. Developing new assessment and appraisal techniques,
2. Assisting in continuous objective development through counsel on the capacity to evaluate developed behavioral objectives,
3. Collaborating with ancillary research resources to improve design techniques,
4. Evaluating the achievement of stated subsystem objectives,
5. Designing data gathering instruments for recording student input characteristics and output behaviors,[1]
6. Developing, with Management-Planning and Information Retrieval Subsystems, means for transmitting findings from one program or subsystem into the recycling plans of other programs and subsystems,
7. Designing means for gathering baseline data,
8. Designing systems for the collection and display of longitudinal data,

---

[1] Some specific examples of the kinds of data which might be collected about students and the manner of their collection are suggested in Table IX-1

9. Recommending to the Planning Board new thrusts in research,

10. Designing means to assess the explicit behaviors as well as the attitudes and values of students,

11. Providing descriptive and research data on such persons with BSTEP as:

    a. the trainee,

    b. the on-campus faculty,

    c. the clinical professor,

    d. local school district personnel,

    e. pupils taught by the trainee, and

12. Evaluating the effectiveness of instructional modules, of all kinds, in meeting stated objectives.

TABLE IX-1

EXAMPLES OF POTENTIAL DATA RELATIVE TO A TEACHER PREPARATION PROGRAM

1. Who is He?
   - a. life history information-typology
   - b. his attitudes toward teaching
   - c. his attitudes toward children
   - d. his knowledge about the teaching profession, learning theory (massed vs. distributed practice), learning disorders (such as dyslexia,) etc.
   - e. his opinions about such issues as "teaching myths, the soft job" the right of the teacher to strike, etc.

2. His performance
   - a. at this stage, characteristics must be amassed on the student that can be used to not only predict his success in the program (at different stages) but, more important, to permit each characteristic to be examined to determine its relationship in identifying the "superior teacher." Ideally, a test battery for selecting student candidates for a teacher training program should be developed. A comprehensive file on each student might include additional information such as:
   - b. reactions to filmed teaching episodes - staged learning (authoritarian-permissive) and with different types of children (minority groups, disciplinary problems, unmotivated child, whiz kids, etc.)
   - c. teaching episodes - at various times in the program the student should be asked to perform as a teacher. Evaluation of this performance can be made by video-taping the student. These "micro-sessions" can be criticized by the students being taught, by the intern himself, by his peers, and by the professional education course work. A critique of this tape will be used as baseline data.

TABLE IX -1 continued:

d. The student could also be taped when participating in such "on the job" simulation as parent-teacher conferences, disciplining a student, interpreting a student's test score information, assigning grades, etc.

3. Other Areas

a. a system for feedback to the student will be developed to inform him not only of his progress throughout the program - but to enable him to capitalize on his strengths and improve on or overcome his weaknesses. This system can be developed using the managerial techniques similiar to ones set up in performance appraisal programs. Another subsystem of feedback (performance appraisal) will be designed for the college faculty working in the program and the student's supervisor (intern consultant) and college supervisor. This is discussed in Phase II -The Professional Teaching Staff.

b. If there is any credibility to the adage "Teachers Teach as they were taught" and especially using the methods they learn under, then an evaluation of the modes of learning experienced by the student must be examined. Does a total immersion into the different types of teaching-learning environments (e.g., large lecture, small group, programmed instruction, closed curcuit TV, simulation, etc.) exist for the student. And what are his reactions and performance under each type of of teaching.

c. Several control groups of students being educated in the "traditional teacher training programs" should be identified. Several because we should include groups from other large and small teacher training programs from other schools (large and small) such as Columbia, Stanford, Central Michigan University, Colorado State College (small liberal arts colleges with teacher training programs, etc.).

RELATIONSHIP OF THE EVALUATION SUBSYSTEM TO OTHER SUBSYSTEMS

The Evaluation Subsystem will provide certain general services to each of the major subsystems in the project, i.e., the Program Development Subsystem, Clinical Experiences Subsystem, Information Retrieval Subsystem, and the Management Planning Subsystem. The nature of these services will be very similar, although the specific applications will be different for each of the major components. In addition, there will be certain specific services which the Evaluation Subsystem may provide for each of the components, because of the nature of the responsibility of that particular component. The following remarks will deal with these two broad categories, general services provided for components and specific services provided for each particular component.

GENERAL SERVICES OF EVALUATION COMPONENT. The evaluation component will help members of the project to examine critically their statement of goals and objectives. It should assist members to clarify their language and to simplify it in asserting their specific goals or objectives. The Evaluation Subsystem staff can call attention to some of the logical implications of goals and objectives.

They can also assist personnel in stating those objectives in behavioral terms and providing reactions to the statements of members in each of the components. The evaluation group can assist the subsystems in suggesting those goals or objectives which may be readily evaluated by observing certain behaviors.

The evaluation staff can suggest research designs which will help participants in the various subsystems to collect empirical evidence relative to their specific goals. The evaluation staff can assist them in checking hypotheses which may be tested relative to one or more of the goals or objectives.

The evaluation staff can suggest standardized testing instruments which are presently available, with known reliability and validity, and which may be suitable for the purposes of faculty in the other components. The evaluation staff can recommend certain procedures which would be appropriate for establishing normative estimates of success or failure in achieving the objectives by students participating in a particular module.

The evaluation staff could assist in writing test items which might be useful in evaluating the achievement of certain goals. The evaluation staff could be helpful in recording observations and conducting the conventional statistical analyses which would be appropriate for data collected to test hypotheses in one or more of the components.

ASSISTANCE TO PROGRAM DEVELOPMENT COMPONENT. The staff of the Program Development Subsystem will compile a series of modules which relate to experiences judged by the faculty to be important for the prospective elementary school teacher. In addition to the general services, the evaluation staff could assist in defining the instruments and procedures for collecting evidence to measure behavior of the objectives specified in one or more of the modules. The evaluation staff could help program development in establishing normative measures and relating their evaluations to the specific objectives which they have specified. See Figure IX-7.

ASSISTANCE TO THE CLINICAL COMPONENT. The Clinical Experiences component emphasizes the inquiry mode and the client-centered approach to teacher education. These are illusive and intangible ideas which have been difficult to measure. The evaluation staff could be helpful in defining original study procedures to collect empirical evidence and in creating new instruments which will be useful to the clinical staff in estimating their successes and failures in achieving their objectives. See Figure IX-8.

ASSISTANCE TO THE INFORMATION RETRIEVAL COMPONENT. The evaluation staff could be helpful to the Information Retrieval Subsystem in estimating the extent to which their services have been utilized by other members in the teacher education project. The evaluation staff may be able to project other forms in which the data or information may be collected and stored and be more useful to other component participants. See Figure IX-9.

Figure IX-7

Conceptualization of the Relationship of the Evaluation Subsystem
to the Program Development Subsystem

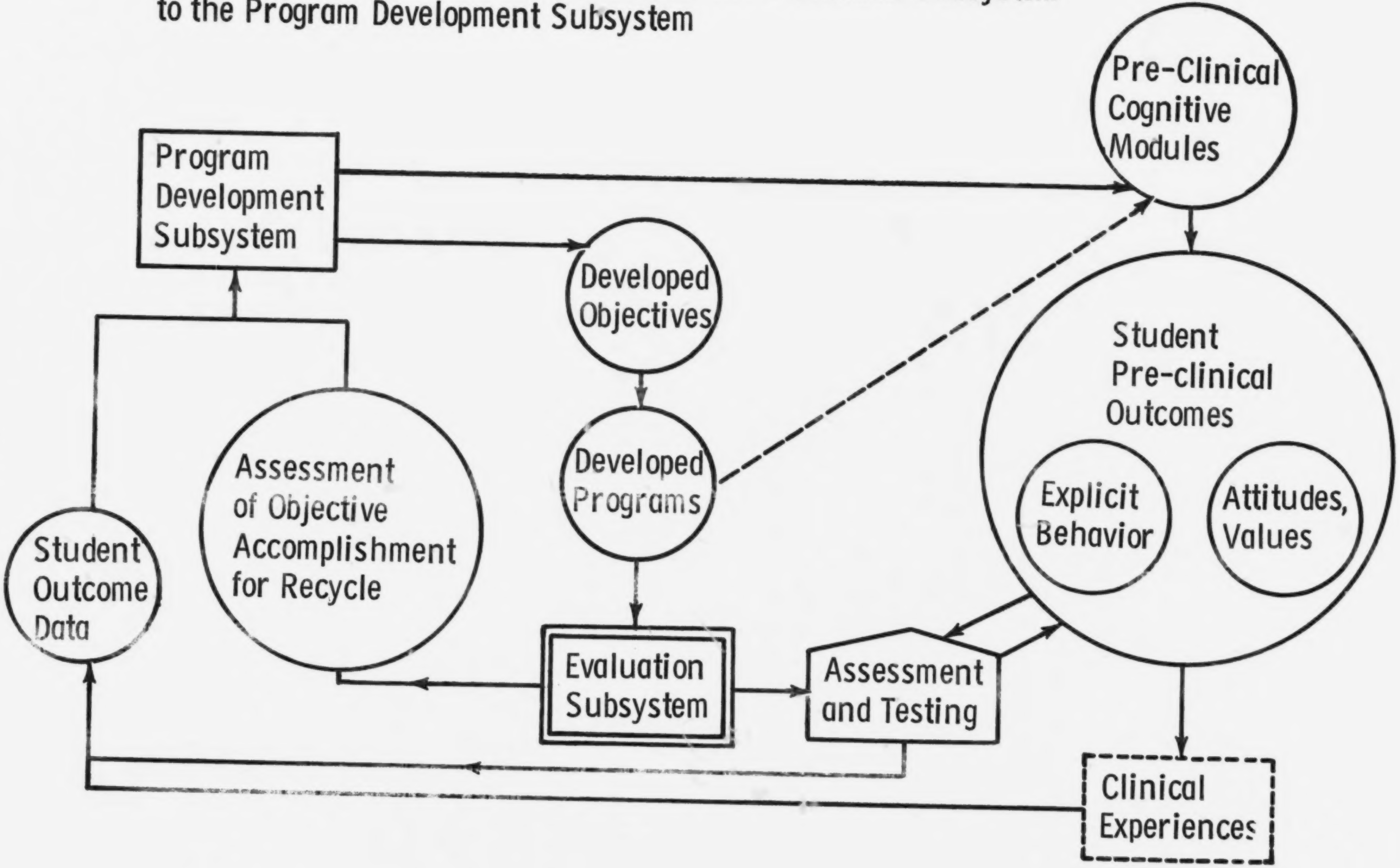


FIG. IX-8

Conceptualization of the Relationship of the Evaluation Subsystem to the Clinical Experiences Subsystem

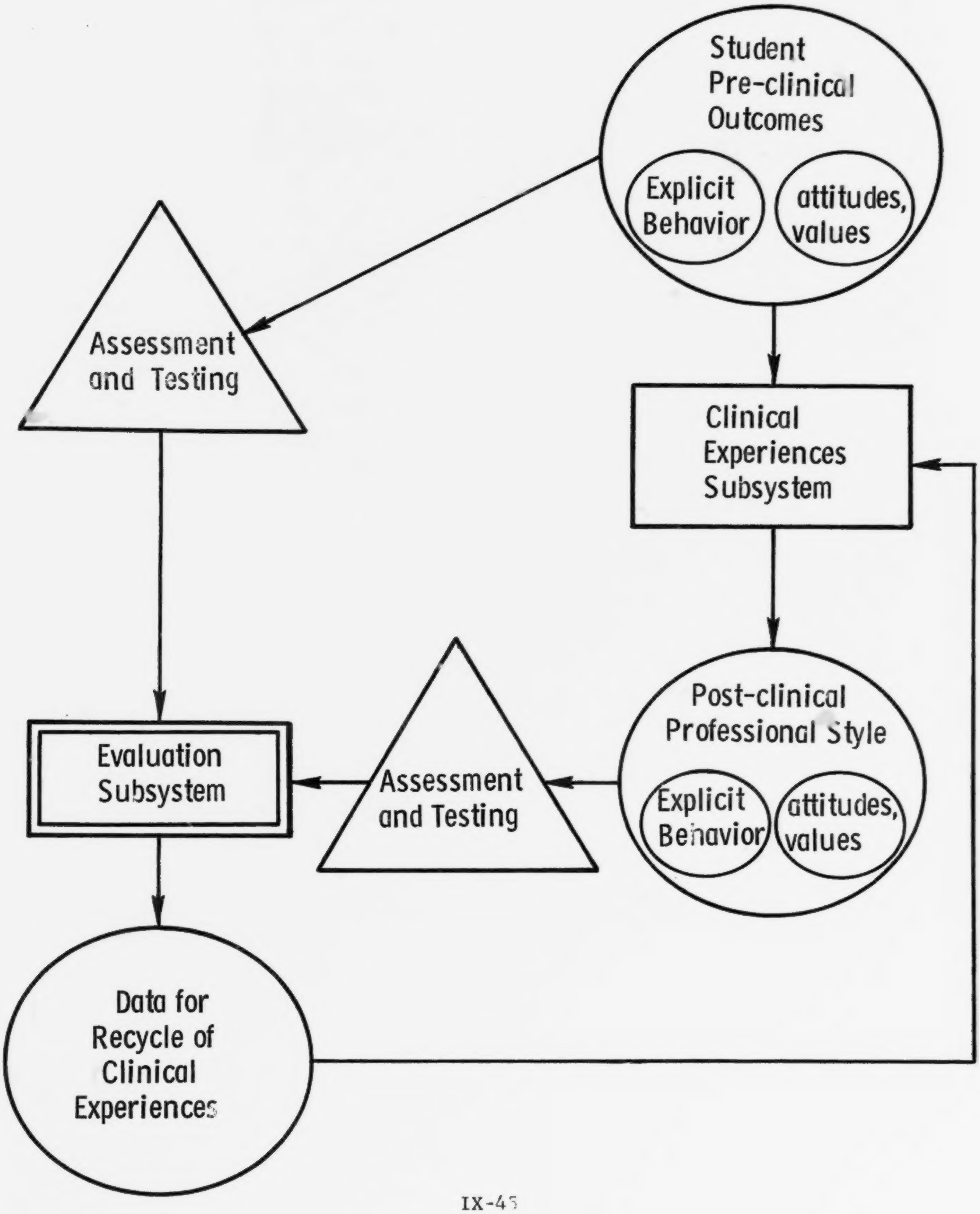
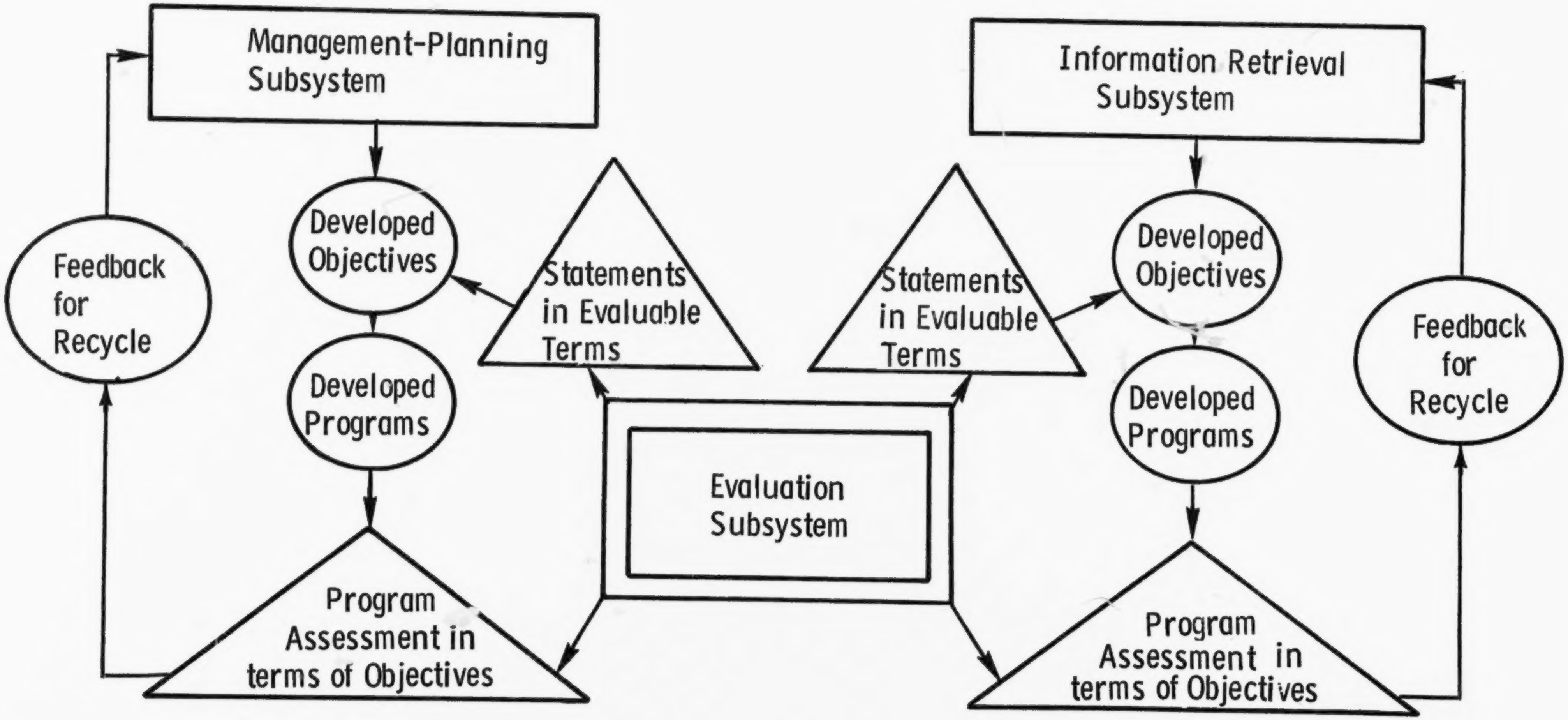


FIG. IX-9

Conceptualization of the Relationship Between the Evaluation Subsystem and the Other Service Subsystems


Management-Planning Subsystem
Developed Objectives
Developed Programs
Program Assessment in terms of Objectives
Feedback for Recycle
Statements in Evaluable Terms
Evaluation Subsystem
Statements in Evaluable Terms
Information Retrieval Subsystem
Developed Objectives
Developed Programs
Program Assessment in terms of Objectives
Feedback for Recycle

PERSONNEL REQUIREMENTS FOR EVALUATION COMPONENT STAFF:

Director: The director of the evaluation component should have substantial experience in teacher education. His academic studies should be in philosophy and logic as well as linguistics and probability theory. The previous experience in teacher education would be essential in helping him to understand the problems and parameters which he is attempting to evaluate or provide leadership in evaluating. The work in philosophy would be helpful in dealing with abstractions and providing the assistance in considering ideas which are hostile and/or diametrically opposed. Extensive work in logic would enable him to assist the other members in utilizing the deductive power of logic and maintaining a reasonable sequence of ideas and in drawing inferences from those ideas. The work in psycholinguistics would enable him to deal with the pragmatic difficulties of expressing ideas in language. The work in probability theory would enable him to comprehend the statistical inference techniques which are essential to his role and to relate the inductive aspects of his role as evaluator to the deductive statements which are implicit in the statements of objectives and goals.

Assistant Director: The assistant director should have competency in research design, psychometrics, social psychology, and systems design. The research design is essential in terms of dividing specific research techniques which would be helpful to the component members in defining ways of testing their ideas. Background work in psychometrics would be essential for the assistant director, in order that he would have a basic literacy in the techniques of measurement. Work in social psychology would be important for the assistant director in order to establish minimum understanding of some of the techniques and procedures in the behavioral sciences. Systems design work would be important for the assistant director in order to organize and assist the staff in the various components to plan and direct their efforts in an orderly way with reasonable expectations of successful conclusions to those efforts.

Statistician: The statistician should be available to the evaluation staff and this could take the form of a consultant. This would be necessary so that the evaluations which would be recommended would follow accepted sampling procedures and could take advantage of the most recent advances in mathematical statistics and statistical inference.

Programmers: It is recommended that programmers be available to the evaluation staff. These persons should have competencies in FORTRAN programming as well as COBOL programming. It is expected that the requirements for evaluation will make it necessary to write original programs or to make modifications of existing programs. FORTRAN and COBOL have peculiar strengths and it would be desirable to have programmers who could communicate with staff personnel in each of the components and select the appropriate computer languages to do their tasks efficiently.

Secretary: Secretarial services would be available to the project staff.

CLINICAL EXPERIENCES SUBSYSTEM

In fields such as medicine and psychology the clinic has long been an indispensible component in the preparation of professional personnel. In these fields, the clinic is the setting in which students observe, study, and finally apply hypothesized solutions to medical and psychological problems outside the controlled conditions of the laboratory. Working with experienced colleagues, students are expected to assimilate diagnostic and prescriptive skills that will enable them to function effectively as professional practitioners. To conceive of public schools as field settings for the professional preparation of teachers through clinical study is a relatively new concept. Although many colleges and universities have developed working relationships with local school districts in the preparation and supervision of student teaching experiences, traditional forms of student teaching do not automatically qualify as clinical experiences. If the teacher trainer and the training institution are to profit from the clinical concept as conceived herein, new dimensions must be added to convert student teaching into a more professionally useful experience.

Clinical experiences must be designed to permit the student to test his behavior and his style and to record the effects of that behavior and style. His emerging professional behavior must be permitted to interact with and to be played against other clients and other professionals at an echelon and in programs consistent with his long-term professional aspirations. Out of the clinical experience must come:

1. Acceptance or rejection, by the trainee, of the appropriateness of explicit teaching behaviors within his operational style through an analysis of cause and effect relationships within an environment defined as to its contribution to the appropriateness of the behaviors.

2. Revised behavior, on the part of the trainee, which is reflected in increased decision-making capacity, improved habits of investigation, and an aroused

concern for continuing professional contributions.

3. Research findings about teaching behavior, the learning phenomena, and systematic interactions which must be displayed for subsequent input by the applied scientists who are in the teacher training role.

CONTRIBUTION TO THE SYSTEM

The Clinical Experience Subsystem is that part of the total teacher education project which is responsible for developing clinical experiences for teacher trainees in real school or carefully simulated settings. Its major contributions will be two fold. First, the subsystem will provide the teacher trainee with a laboratory in which to test his behavior. It can be expected to assist the trainee in:

1. Developing hypotheses about appropriate behaviors for given teaching situations,
2. Testing hypotheses in actual field settings,
3. Providing feedback for the trainee from practicing professionals,
4. Analyzing the teacher behavior of other professionals,
5. Revising behavior in light of clinical findings,
6. Observing the reaction of learners to different modes of teaching behavior,
7. Hypothesizing future behaviors of the learner as they might relate to subsequent teaching behavior,
8. Testing hypotheses about learning behavior and,
9. Providing clinical records to assist subsequent trainees in understanding the teaching-learning relationship.

Second, the clinical experiences subsystem must provide feedback from findings about the relationship between teaching and learning into the total teacher preparation program. Thus, the subsystem must be engaged in record keeping in a fashion which permits a behavioral description of the teaching-learning cycle and which springs from explicit clinician behavior.

RELATIONSHIP OF THE CLINICAL EXPERIENCES SUBSYSTEM TO OTHER SUBSYSTEMS

The teaching training program, during non-pre-clinic experiences, must relate closely to the Clinical Experiences Subsystem. The Program Development Subsystem, largely responsible for the preparation of non-pre-clinical experiences, must consistently be aware of the clinical experiences provided by the Clinical Experiences Subsystem. The initial behaviors to be tested by the trainee in a clinical setting will be developed largely from learnings in the pre-clinical experiences. The teaching behavior of the professional staff of the pre-clinical experiences will also be a major input into the professional style of the clinician.

In its role as data developer, the Clinical Experiences Subsystem must provide feedback to the Program Development Subsystem concerning the findings of the clinician and clinic staff about teaching-learning relationships. The outputs from such clinical studies must be inputs into the preparation program of subsequent trainees.

The Information Retrieval Subsystem must serve a repository role for the data developed by the clinical experiences subsystem. Records developed from clinical experiences and the findings from clinical experimentation must be sorted, stored,

---

[1] It should not be assumed that all clinical experiences are subsequent to all pre-clinical experiences. Rather, the two experiences are developed in a complementary fashion more circular than serial.

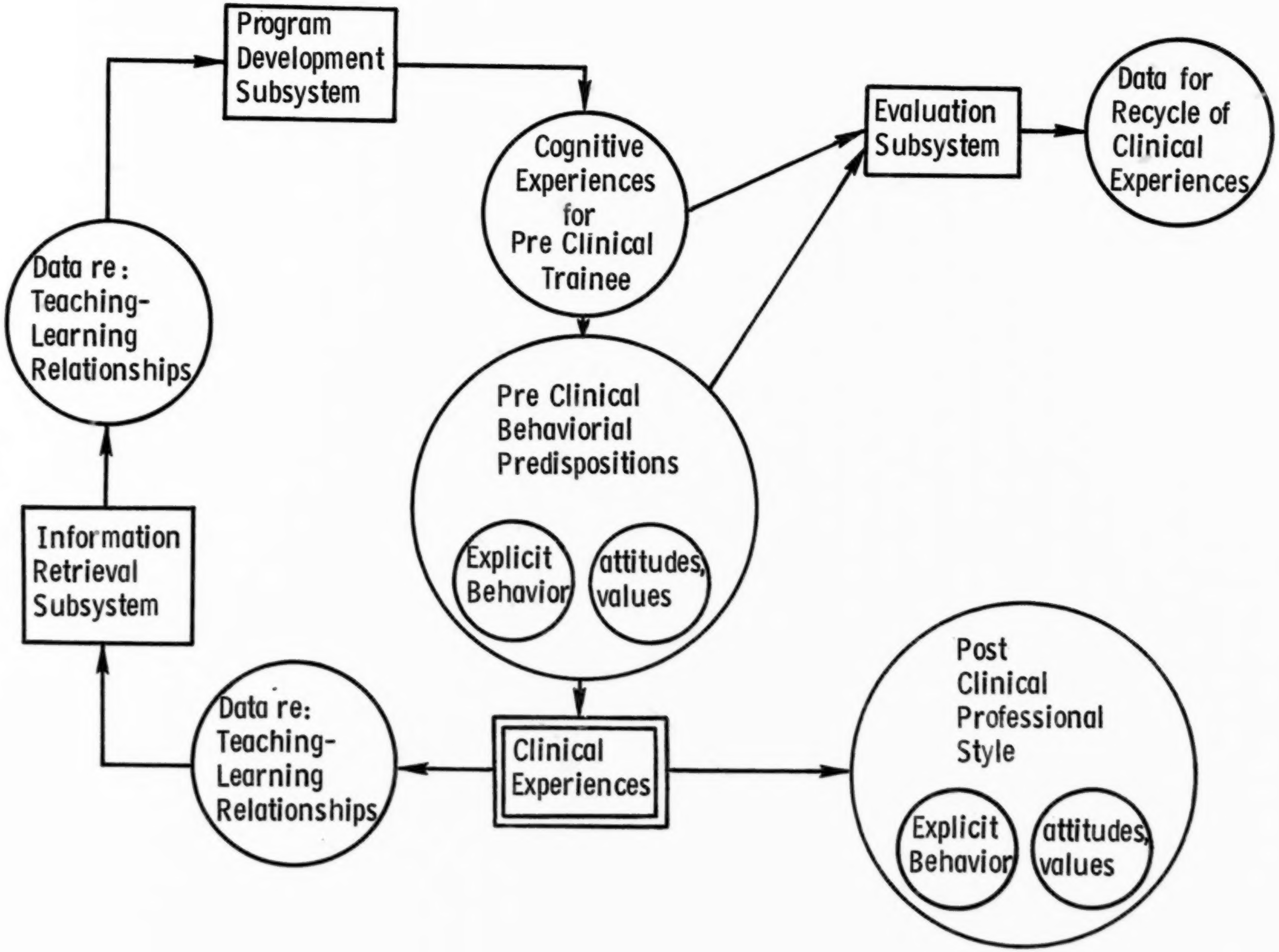
and made ready for retrieval by the Information Retrieval Subsystem. Figure IX-10 is a conceptualization of the manner in which the clinical experiences subsystem is related to other components of BSTEP.

ESTABLISHING THE SUBSYSTEM

Colleges and universities engaged in teacher training require real school settings if proper clinics are to be established. Schools and universities alike have vital interests in teacher education and each has resources not available to the other, both of which can contribute to the development of the teacher training enterprize. Universities are dependent upon school systems to provide the clinical setting in which the final stages of training can take place, and schools depend upon universities for a supply of teachers who are continually better prepared to respond to the imperatives impinging upon public education in their local districts. Development of clinical experiences must be approached in a cooperative-partnership manner rather than following the old "consumer-producer" model if a new model of teacher education is to evolve. In the past, pre-service teacher education has been viewed as a responsibility of the college and university, along with graduate study in education. In-service education, on the other hand, has been mainly left in the hands of the employing school district. In a quieter age this arrangement may have been quite satisfactory; at the current time however, it fails to meet the increasing press toward professionalism. As the educational needs and expectations of our society have grown and as school curricula have been correspondingly modernized, systematic in-service education of teachers has become more imperative.

The conditions which surround in-service education programs offer outstanding potential for improving the effectiveness of teacher education--more perhaps than the conditions on campus in which pre-service teachers are educated. The advantages of intimacy, reality, and similarity of needs and pruposes are more directly related to in-service education settings than to the pre-service settings. School

FIG. IX-10
Conceptualization of the Role of the Clinical Experiences Subsystem


Program Development Subsystem
Cognitive Experiences for Pre Clinical Trainee
Evaluation Subsystem
Data for Recycle of Clinical Experiences
Data re: Teaching-Learning Relationships
Pre Clinical Behaviorial Predispositions
Explicit Behavior
attitudes, values
Information Retrieval Subsystem
Data re: Teaching-Learning Relationships
Clinical Experiences
Post Clinical Professional Style
Explicit Behavior
attitudes, values

districts are in a position to offer essential support to teacher education through offering their school environments as clinics. They are not usually prepared to assume the entire task; either at the pre-service or in-service level. The university is able to offer faculty research facilities and its intellectual tradition to the clinical setting, but it lacks the essentials of children and the purposes for which children attend schools. Obviously, the two institutions must share the responsibility for teacher education, with each contributing those elements which it possesses.

A properly functioning network of clinic schools will permit the university, in partnership with public schools,to provide realistic conditions for pre-service undergraduate education, and it will also permit the university to carry an appropriate share of the responsibility for in-service education. The long-term relationship between institutions that is implicit in the clinic school concept offers opportunities for research and development that transcend those offered by short-term or spontaneous associations which are developed solely on the basis of current needs, only to be terminated as studies are completed and the personnel are transferred, or financial support is withdrawn. To be of a permanent yet dynamic nature the clinic school network needs to be launched on a stable financial base with a self-renewing management plan that can accommodate change while at the same time providing for clear lines of responsibilityand authority. One model for the establishment and administration of a suitable financial base may be found at the end of this section.

It should not be assumed that all clinical experiences must be conducted "off-campus." Some experiences in which teachers engage are available in rather exact form in colleges and universities. Other experiences can be simulated through a variety of simulation techniques. This subsystem is responsible for the development of new and creative simulation experiences.

ESTIMATED PERSONNEL REQUIREMENTS

For each one-hundred graduating teacher trainees, it is estimated that the clinical experiences subsystem will require the following kinds of personnel:

1. Clinical professors (each clinical professor to supervise the clinical experiences of trainees.
2. Center Director (to serve as the director of the regional clinic.
3. Secretarial assistance

In addition to the above personnel who can be quantified on the basis of the number of graduates per year, the clinical experiences subsystem would additionally need:

1. Subsystem Director (a specialist in teacher-education with extended research competence),
2. Administrative assistant,
3. Programmer, and
4. Secretarial assistance.

The subsystem director can be housed on campus or at any location which permits reasonable liason with field center directors.

PROCEDURES FOR MODIFICATION OF SUBSYSTEMS

Revisions of the clinical experiences subsystem will largely come from the experiences of the clincial professors, center director, the subsystem director, and the CE Advisory Board. Operational imperatives will largely dictate the nature and timing of modifications within the clinical experiences concept. Modification will largely be predicated upon the subsystems ability to provide feedback into the pre-clinical experiences of teacher trainees and the capacity of the subsystem to modify the teaching behavior of clinicians on the basis of their findings in the clinical setting. Modifications may also be dictated by changes in the clinical experiences. In fact, if cycle changes are not dictated there is every indication that the clinical-training cycle has failed to provide the data necessary for its own improvement.

PERSONNEL IMPROVEMENT PROGRAMS

Clinical professors do not exist within the field of teacher education! The conceptualization of teacher education through clinical experiences is new and therefore the in-service training of clinical professors is imperative. Blocks of time should be provided prior to the development of educational clinics which will permit the clinical professors to observe, and preferably to work in, medical and psychological clinics. Developing appropriate record systems, skills of observations, methods of testing behaviors, development of taxonomys of eductional diagnosis and treatment, are only a few of the skills which clinical professors must develop to a high degree. Provision must be made for sharing among clinical professors the kinds of experiences which seem to provide for increased success of the clinicians.

FACILITIES AND EQUIPMENT REQUIREMENTS

With the exception of appropriate linkage to information storage and retrieval systems no special equipment is necessary to launch the clinical experiences subsystem. The clinic schools themselves however, do need to meet certain requirements. They must be of a nature diverse enough to permit the clinician to measure his behaviors against multiple environments, exhibit a willingness to share in the partnership of teacher preparation, be equipped with the aids to teaching which are representative of American public schools, and they need to have adequate conference space to permit lengthy dialogue between clinical professors and clinicians.

THE MICHIGAN STATE UNIVERSITY ELEMENTARY INTERN PROGRAM AS AN ORGANIZATION AND FINANCIAL MODEL

Several years after the off-campus residential centers for student teaching were established, Michigan State University took a second giant step toward a truly clinical program of teacher education. In 1958, several community college officials expressed interest in developing a cooperative program in teacher education with Michigan State University. The idea was readily accepted by the university and a planning committee was set up by the Director of Teacher Education. As early as fall, 1959, The College of Education initiated a new program for the preparation of elementary school teachers. Originally the program was called The Student Teacher Education Program (STEP), but in 1963 the name was changed to The Elementary Intern Program (EIP).

The Elementary Intern Program is a modelof inter-institutional cooperation involving three kinds of institutions--public school systems, community colleges, and the university. In the fall of 1968 eleven EIP centers were in operation across the state of Michigan. The centers have schools in the vicinity of Alpena, Bay City-Saginaw, Battle Creek, Detroit, Livonia, Macomb County, Pontiac, East Lansing, Flint, Grand Rapids, and Port Huron. In all, forty-eight school districts participate in the Elementary Intern Program.

The program consists of slightly more than four academic years of study for participating students. The first two years may be taken in the cooperating community college or in any other accredited two-year or four-year college. Upon completion of the first two years of college the student transfers to Michigan State University as a junior and a member of a particular EIP class. Usually the summer following completion of the sophomore year is spent in residence on the MSU campus. While on campus the student takes liberal arts and general education courses leaving professional education courses to be taken in the center. Approximately half of the centers offer classes to juniors in fall and winter terms, the others offer classes in winter and spring. During the fall or spring term, as the case may be, when the student is not taking classes in the center he is in residence on the MSU campus. Most students continue their on-campus work for five-weeks during a second summer, but this varies according to the student's ability and/or willingness to take heavy academic loads during other terms. In the center the student takes all of the professional education courses required by the university and for Michigan certification. In the first term in the center he takes the methods teaching "block" which consists of fifteen term credits in the methods and materials for teaching reading, language arts, social studies, science, and mathematics. In addition to these courses he takes children's literature for three credits. Instructors for the courses are provided by the university and are generally members of the regular faculty. While engaged in these courses the student is regularly assigned to a school and participation assignments are made by the center staff and by the cooperating teacher and principal in the school. The intention is to tie the theories of instruction studies in the university classroom to the realities of the elementary school classroom and in this way to increase dramatically the relevance of the educational program to the work of the teacher.

In the second term in the EIP center the student engages in a somewhat shortened student teaching experience (thirty-two full days of teaching for seven credits instead of the usual MSU requirement of forty-five for fifteen credits). Quite commonly the student teaching assignment is carried out in the same school and with the same cooperating teacher with whom the student became acquainted in the earlier observation and participation experience. This partially compensates for the shortened student teaching experience by making it unnecessary for the student to become acquainted with a different group of children and another set of classroom expectations. Concurrently with student teaching a day each week is devoted to a five-credit course in educational psychology. As with the methods of teaching, the rationale for this arrangement is that the principles of psychology will better serve the teacher if they are introduced at a time when they may be directly and immediately applied to managing children in a classroom. Efforts are made by the instructor to relate psychological theories to real classroom problems, and to match course assignments to the individual needs of students as those needs develop in student teaching.

Finally, four-term credits are earned in a workshop or independent study designed to specifically prepare students for getting school children off to a good start in the fall. On the assumption that the first weeks of school are vital to the success of a teacher, the students in the workshop are asked to make specific plans and preparations for the first weeks of their intern teaching year. The students are also given explicit information about the auxilliary services that are available to teachers within the particular school district in which they will teach.

With this preparation and with typically 165 term credits (180 are required for graduation), the students who have successfully completed all prerequisite assignments are accepted by cooperating school districts as intern teachers. Special teaching certificates are available to interns on the basis of an agreement between the State Department of Education and the university. Intern teachers are assigned to classrooms and given the same responsibilities as other teachers, but they are also provided sustained and individualized assistance by intern consultants throughout the academic year. Interns are paid a stipend lower than the salary of first year teachers with the bachelor's degree, but the participating schools save no money in this way because they are required to contribute to an EIP fund an amount equivalent to the first-year salary of a certified teacher for every intern employed. This fund is the basis for the center budget and carries the operational costs of the program except for that part contributed by the university. The financial arrangements for the centers are described in more detail in a later section.

Outline of the Elementary Intern Program

Note: Some variation in detail exists among the eleven centers, but this typifies the program for students in a center which offers courses in the fall and winter terms.

Sequence	Experience	Term credits
June	Graduation from high school. (This is the ideal time to make the decision to enter the Elementary Intern Program.)	
September-June	First two years of college at the cooperating community college or at some accredited college or university. Liberal arts emphasis desired.	90
	(The decision to enter EIP may come as late as the last semester of the sophomore year. Date of application should permit admission to the summer term.)	
June-August	Summer school at the university; ten-weeks; substantive courses for completion of a major and two minors, as well as for other program requirements; no professional course taken on campus.	15
September-December	Fall term at EIP center; methods courses in teaching reading, language arts, mathematics, social studies, and science; literature for children course; concurrent assignment to an elementary school for observation and participation; micro-teaching and videotape replay facility used in methods courses.	18
January-March	Winter term at EIP center; student teaching for 7 credits (eight weeks, four days per week); educational psychology class for 5 credits	

	(taught in conjunction with student teaching, one day per week); two-week workshop preparatory to intern teaching in fall, 5 credits.	16
March-June	Spring term at university campus; courses to complete major and two minors.	16
June-July	Summer term at university campus; usually five-week term.	10
September-June	Full academic year as paid teacher-intern at EIP center; stipend in excess of $4000 for the school year; assistance from intern consultant throughout the year; 1 : 6 ratio of intern consultant to interns.	10
	Evening class in philosophy, history, and sociology of education January to April. Graduation from MSU: B.A. degree	5
	Total	180

A NEW PROFESSIONAL POSITION

The role of the intern consultant may be unique to the Elementary Intern Program. It is a major source of strength in the program. Intern consultants occupy a new professional niche in education. They are teacher-educators who have come to their position by virture of excellence in teaching; they bring to it a practical rather than a theoretical orientation; they speak with the authority that grows from personal competence and experience in teaching children. The intern consultant attempts to build a helping relationship with the intern that will result in trust and confidence rather than in rigidities attendant to the usual superior-subordinate relationship.

To assure conditions in which individualized and detailed assistance may be offered the ratio of interns per intern consultant is kept low, usually six to one. The power to influence teaching that intern consultants hold can be appreciated when it is noted that they are primarily responsible for the professional growth of only six students. When this essential responsibility is not jeopardized intern consultants may also assist with teaching and committee responsibilities within the center. Outstanding opportunities for professional growth are also available to intern consultants as a consequence of their affiliation with the university. These would include social and professional associations with colleagues from the state-wide network of EIP centers at regularly scheduled meetings, participation in research and implementation projects, committee assignments shared with personnel from the university and other cooperating districts, staff privileges on the university campus, attendance at local, state, and national education meetings, and the stimulation of constant association with college students.

In a sense, the establishment of the intern consultant position may be thought of as a school district's concern for and entry into teacher education as a full and respected partner of the university. The extent of the cooperation between the two institutions may be gauged by considering the staffing arrangements of an EIP center. A center is directed by a full-time member of the university faculty who lives in the community in which the center is located. His salary, business expenses, office furniture and supplies are provided by the university, but his office space is provided by a cooperating school district or by the community college from which most of the EIP students come. The professional staff for a center consists of intern consultants who live in the locality and university faculty members who come to the center to teach classes. Intern consultants are employees of the cooperating school districts but they are directly responsible to the center director. He is an MSU employee, Superintendent and Community College Advisor who is responsible to the superintendents of the cooperating school districts and to the president of the community college, as well as to his designated superiors in the university. Though it may be surprising that such an arrangement can function at all, large doses of mutual respect and confidence have enabled all centers to operate without noticeable administrative friction.

In addition to the staff directly responsible for the educational program of a center, a host of other professional people are enlisted from time-to-time on an unpaid basis to support the intern program. Building principals assist in assigning students to observation and teaching posts, in arranging for children for small-group and tutorial participation, in providing space for seminars and classes, in recruiting students for the program, in accepting interns as full-time teachers, and in generally supporting the internship concept of teacher education. Directors of the various administrative divisions of the school systems assist in handling center financial accounts; in assigning interns to classrooms; in providing publicity for the program; in making available art, music, physical education, and media specialists, speech therapists, diagnosticians, conselors, and social workers for the instruction of students; in interpreting school policies; in formulating operational procedures within the center; and as panelist, speakers, and workshop leaders for the instruction of the prospective teachers. Teachers accept students as classroom observers, participants, student teachers, and as colleagues during the intern year; they attend meetings for supervising teachers; open their classrooms to university observers and researchers; assist students; and generally support and encourage students. Custodians, secretaries, and other non-professional staff members also assist students in many unspecified ways. The Elementary Intern Program is clearly an intricate, cooperative task requiring the commitment of many people for its success.

FINANCING AN EIP CENTER

To remain viable, an intern program must obviously have a stable source of financial support. This principle was recognized at the outset in the development of the Michigan State University intern program and even though generous support for program development and evaluation was provided by the Ford Foundation, foundation money was never used for operational costs of the program. Internship programs have floundered when grant funds were depleted.

The cost of an intern program is substantial when compared to other educational programs. Teaching interns presently receive stipends in excess of $4000 per year in the Elementary Intern Program. Intern stipends are reviewed annually and adjusted in the same manner that teaching salaries are adjusted. The program operates on the principle that stipends must be kept adequate even though they are far from competitive with salaries. At one time stipends were based on a fixed percentage of the basic salary for fully certified teachers but this rigidity was found to be difficult to maintain through all the vicissitudes of individual local situations.

School districts which employ intern teachers provide their stipends. however, they do not save money because stipends are lower than salaries. As a matter of principle as well as state regulation, it would be inappropriate to provide a teacher education program which permitted the exploitation of students or which made available "cut rate" teachers to schools. Furthermore, such a practice would be in violation of basic economic principles related to competitive salaries for professional teachers and would undoubtedly induce opposition from teachers' organizations whose support is needed by the intern program. Consequently, cooperating school districts are required to contribute to the program an amount equivalent to the salary of a first-year certified teacher on the district salary schedule for each intern employed. Out of this fund is paid intern stipends, salaries for the intern consultants, secretarial assistance for the program, traveling expenses for consultants, teaching materials and equipment to be used by the interns or to directly improve the educational program for the interns. An exemplary budget for an EIP center is included in this report. All decisions on expenditures are based on their expected benefits for interns and are subject to approval by the center director and cooperative superintendent of schools. For example, the quality of the intern program is believed to be related to the intensity of intern consultant assistance to the intern; it is therefore deemed appropriate to maintain a ratio of six interns to one intern consultant. This decision is fundamental in preparing the center budget, for it more than any other determines the stipend that can be paid to interns.

The Elementary Intern Program makes possible the completion of a college education for many students who for economic reasons might be denied this opportunity. Because of differences in tuition for on-campus and off-campus courses, the total tuition paid by EIP students is a few dollars more than that paid by other students. However, students whose homes are in the area served by the center generally live at home. This enables them to avoid the costs of board and room on-campus for equivalent of three terms. The intern stipend, though modest usually covers in full the expenses incurred by that experience. Loans and scholarships are available for those whose abilities or financial needs can justify them. Experience confirms that many capable students have been able to enter teaching careers because of the economic benefits they have received through the Elementary Intern Program.

Costs to the university in maintaining the intern program may be somewhat more than corresponding costs for teacher education programs on campus. These differences are reduced when student enrollments in the centers are close to the optimal capacity of the center. (usually 25-30 Juniors and 25-30 Seniors). At Michigan State University program quality has been more of a concern than program cost, for it is recognized that high quality teacher preparation is in the long-run more economical even if its initial costs may have been slightly higher than less relevant programs.

GUIDELINES FOR ADMINISTERING BUDGETS

Elementary Intern Program

A basic tenet of the Elementary Intern Program, agreed to by MSU and all employing school districts, and for which we are responsible to the State Department of Public Instruction, is that school districts generally will neither make nor lose money through support of Interns. Some guidelines for developing and administering EIP accounts, and an illustrated budget follow.

1. Each center is to maintain one account. When more than one school district is part of an EIP Center, one would serve as fiscal agent. That school district will be paid a service fee from the EIP center account for this bookkeeping service.

2. Interns in a center shall receive the same stipend, even where B.A. salaries vary among districts in the Center. Since EIP is primarily a teacher education program, placement of Interns should be on bases other than the amount of stipend. Ideally, all EIP students, regardless of where located in the state, would receive the same stripend, but wide variance in salary schedules may preclude this.

3. Each school district budgets an amount equivalent to its beginning B.A. salary times the number of interns in the district. The total of this amount from all districts in the Center becomes the basis for the Center budget.

4. Each Center Coordinator recommends an annual budget which must be approved by the Director of the Elementary Intern Program and by the School Superintendents from the cooperating districts no later than May 15. It is then the Coordinator's responsibility to administer the account.

5. At the end of the year, the Coordinator shall report income and expenditures in the EIP account to the Superintendents of Cooperating Districts and to the Director of the School for Teacher Education, Michigan State University.

6. Balances and deficits from previous years are cummulative.

7. While small balances and deficits will occur each year, totals will be carried to the following year. Over a period of time account debits and credits should balance.

8. Transfer of funds between districts may be done quarterly or yearly, depending upon Center arrangements.

A hypothetical Center has 22 interns in three school districts. In District A, six interns and one intern consultant are employed; in B, three interns and one consultant are employed. The consultant also works with three interns from District C, but all of his salary is paid by B since this was his employing district at the time he became a consultant. District C employs 13 interns and 2 consultants. The salary of a Center secretary is paid through the EIP account.

The Coordinator, in cooperation with each school district, computes the difference between the district's EIP debits and credits, with the district paying into or receiving from the EIP account accordingly.

SCHOOL DISTRICT A

Credits

6 B.A. teacher positions @ $6100		$36,600

Debits

6 Interns @ $4000	$24,000	
1 Consultant	10,750	
Travel for Consultant	300	
To EIP Account	1,550	36,600

SCHOOL DISTRICT B

Credits

3 B.A. teacher @ $6,200	$18,600	
From EIP Account	3,000	$21,600

Debits

3 Interns @ $4,000	$12,000	
1 Consultant	9,300	
Travel for Consultant	300	$21,600

SCHOOL DISTRICT C

Credits

13 B.A. teacher positions @ $6,050		$78,650

Debits

13 Intern @ $4,000	$52,000	
2 Consultants ($10,500 & $11,300)	21,800	
To EIP Account	4,250	$78,650

EIP ACCOUNT

Credits		
From District A	$ 1,550	
From District C	4,250	$ 5,800
Debits		
1 Part-time secretary	$ 2,000	
To District B	3,000	
Supplies	300	
To District C for Bookkeeping	200	
Contingency Fund	300	$ 5,800

SUMMARY

The Behavioral Science Teacher Education Project has been developed on a management principle conceived as appropriate in permitting two operating and three support subsystems to plan and deliver a new concept in teacher preparation. The component subsystems include:

1. Program Development
2. Clinical Experience
3. Management-Planning
4. Information Retrieval
5. Evaluation

The "organizational glue" which binds the components together is planning. The major planning responsibility of the project is vested with a Planning Board, composed of the director of each subsystem and the BSTEP Project Director. Thus, planning is conceived as a team function which relies upon the capacity and good will of the persons who will be immediately impacted by the outcomes of the planning function with the advice and counsel of an advisory board.

When planning is followed by program decision, the programs are administered by administrative assistants who have no interrelated administrative network - the cohesion is through planning processes as differentiated from the administative maintenance of organizations and activities.

MANAGING THE FIRST CYCLE

Managing the first cycle The first task facing the newly created planning board following their individual employment, is to initiate the planning process by firmly establishing project goals and project objectives.[1]

Following the development of project goals and objectives, five subsystems --Program Development, Clinical Experiences, Information Retrieval, Evaluation and Management-Planning-- need to be made operational for project planning purposes. At this point professional personnel must be assigned to the individual subsystems. As soon as the subunits have secured their professional staffs, operational objectives must be developed by and for each of the program units in much the same fashion as the Planning Board determined project goals and objectives. The individual subsystem director and his professional staff must establish the individual operating objectives which will guide the behavior of their subsystem within the total organization. As before, the objectives must be phrased in evaluable terms and the evaluation subsystem personnel must be available in a consultative role to all units to assure that the total project will be ready for evaluation at the later points in time.

The final task in the initial planning phrase is to convert project and subsystem plans into legitimate requests for resources. Analysis of resources should be made in human, fiscal, physical and time units. The planning subsystems must be available for the consultation to the other four units during this closing state in order that planning techniques such as PERT, PERT/COST, and PPBS can be applied to the task of estimating resources.[2]

---

[1] The reader is reminded that the term GOAL refers to a statement of "what an organization seeks to become or achieve." The term OBJECTIVE refers to the finite steps the organization plans to take in the process of "becoming or achieving." Objectives by their finite nature are evaluable. They are achieved at a moment in time which can be determined with appropriate instrumentation, In the writing of project objectives, the Planning Board must be cognizant of the necessity of phrasing their objectives in a fashion to permit evaluation.

In addition to the development of resource requests the Planning Board must also develop priorities among goals and objectives in order that such decisions can be made in a rational climate uncontaminated by the presence of fixed amounts of dollars. Simultaneously it must establish strategies, as they relate to priorities, in order that alternative routes to objectives can be pre-planned or alterations in time expectations can be reordered should the requested resources not be allocated. The development of requests for resources, the development of priorities among goals and objectives, and the development of strategies to accomplish goals in the absence of unlimited resources, constitute the close of the initial planning process. See Figure IX-11, Phase I.

Phase II is concerned with the human fiscal, physical, and time resources required by the project. When requests have been completed as the final act of the planning process they are normally evaluated by college, university, and funding agency organizations in order that the project plans can be weighed against other demands being made upon the limited resources of the external agencies. Phase II then is initiated by the filtering of requests for resources through governing and funding agencies.

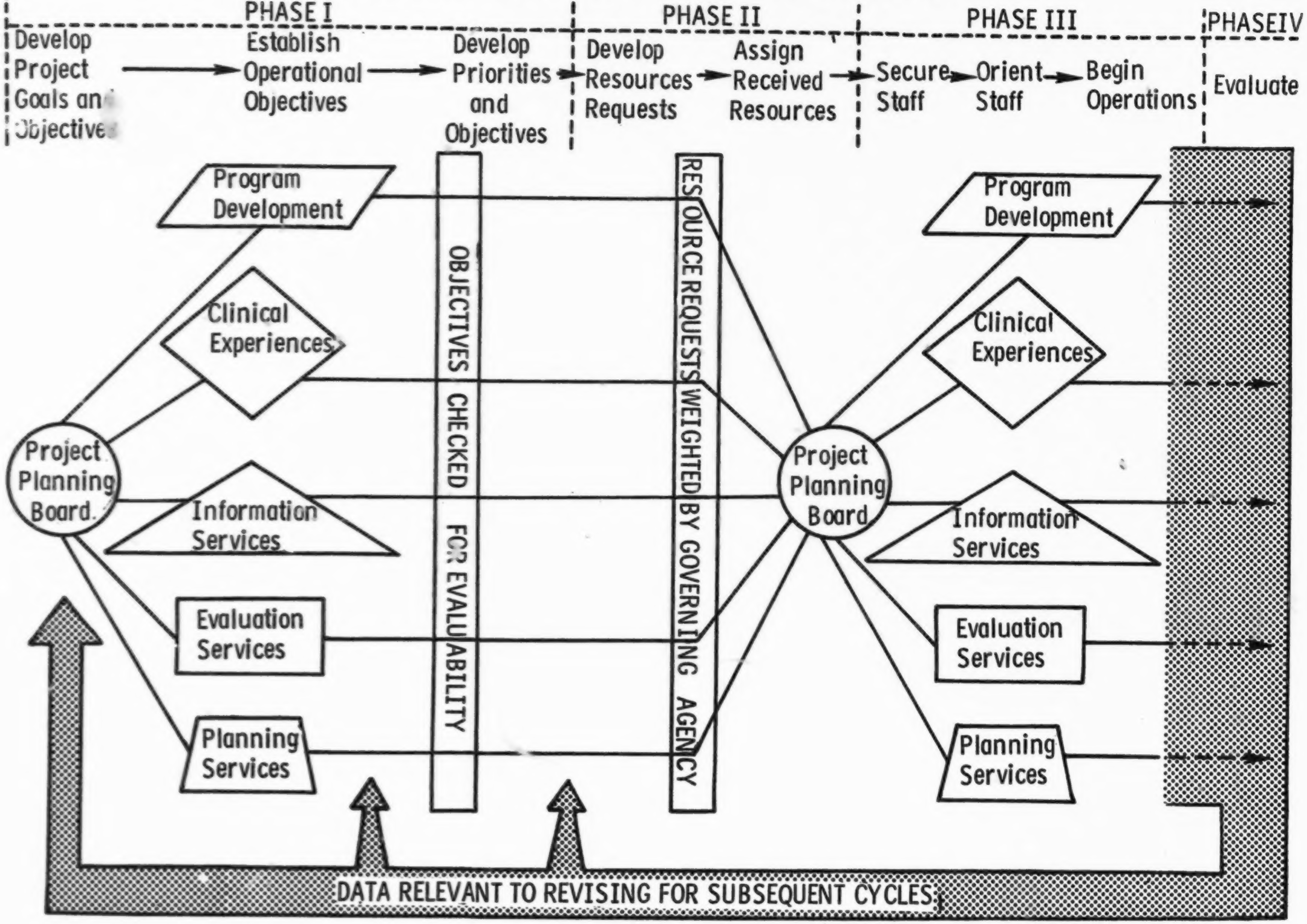
When governing and funding agencies have completed their evaluation and when the resources have been allocated to the *project, the Planning Board can expect that additional planning* will be required. The nature of planning during this phase

---

[2] Program Evaluation and Review Techniques (PERT) as related to both "cost" and "time" are techniques which are available to permit the project and subsystem managers to evaluate resource requirements, resource allocation, and resource effectiveness as they relate to objective accomplishment. Programmed Planning and Budgeting System (PPBS) is another management related tool which can assist the project and subsystems managers to generate their program plans in budgetary terms which will permit them to measure the desirability of electing one alternative over another.

FIG. IX-11

MANAGEMENT PARADIGM FOR TEACHER EDUCATION PROJECT



consists of assigning the allocated resources to the most appropriate places within the project. Actual assignment must be done with respect to the original priority planning and the original strategy as developed. Where deadlines are required PERT systems should be applied. With the assignment of recources the project and its subsystems can become operational. As units become operation, the director can be expected to release administrative responsibility to his administrative assistant. He must retain supervisory control.

Following staffing should come a short period of orientation for both professional and non-professional personnel. Each of the sub-units should be oriented to the goals and objectives of both the project and their own subsystem component. In addition, an overview of the operating objectives of the other units would also seem to be in order. In terms of developing the various subsystems the following order seems to be most desirable:

1. Management-Planning,

2. Program Development,

3. Information Retrieval, and

4. Clinical Experiences.

This order would permit full consultative services to be available in the appropriate sequences. However, the amount of time between establishment and operation should be as short as possible.

Phase IV, Evaluation, completes the first cycle and remains as a continuing feature during subsequent cycles. The internal evaluation is on-going and is supplied by the evaluation services subsystem. Internal evaluation must be concerned with measuring the ability of the subsystems and the project as a whole to achieve goals and objectives. This type of evaluation must be conducted by research experts from the evaluation subsystem. A second type of evaluation which the evaluation subsystem should accomplish is a measure of administrative effectiveness. In short, the Planning Board needs to evaluate the capacity of its operational units to function in the planned manners and fashions. The third type of evaluation is concerned with the appropriateness of objectives. The Planning Board needs to assess whether or not the objectives chosen to accomplish their goals were in fact the most appropriate objectives which might have been chosen from among the several alternatives. This last type of evaluation would be staffed by personnel from both the Evaluation Subsystem and the Management-Planning Subsystem.

Finally, an external evaluation should be conducted of the Evaluation Subsystem by an outside agency not related to the project. In this way circular errors can be largely eliminated. The extenal audit, on a three year recurring basis, should examine both the component subsystems and the project as an entity.

Recycling Phase. At the conclusion of each evaluation, the project and its subsystems must be ready to recycle through re-entering the planning phase. The nature of the required recycling cannot be adequately described because of the infinite number of new variables which might be introduced. Each system of evaluation and each external audit will carry with it implications for revising the manner of project and subsystem operation. The results of some audits will require that new planning be initiated by the Planning Board while other types of evaluations will refer back to the planning capacity of the individual sub-units; some evaluations will be fed back into changed program plans; some may result in changes in administrative operations; others may require modifications in objectives to bring the objectives more in line with the realities as experienced. Each recycle must both purge, renew, and reorder if BSTEP is to succeed in the "quantum leap" it proposes to take.

following persons.

SECTION X

INFORMATION STORAGE AND RETRIEVAL SYSTEM

Behavioral Science Elementary Teacher Education Program

Michigan State University

1968

SECTION X

INFORMATION STORAGE AND RETRIEVAL SYSTEM

VALUE SYSTEMS, MANAGEMENT, AND SELECTION OF INFORMATION

INTERACTION OF VALUE SYSTEMS AND MANAGEMENT DECISIONS.

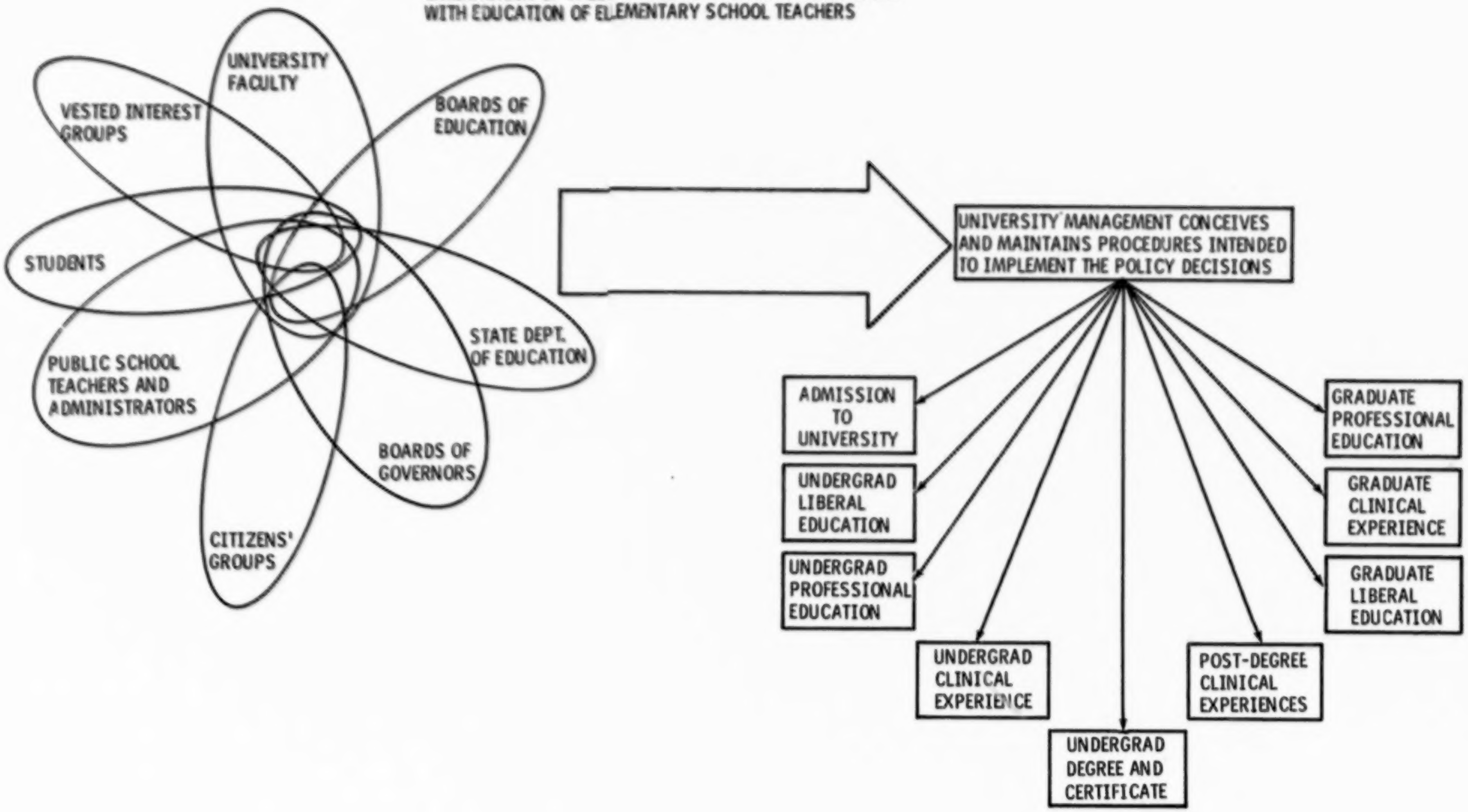
Figure X- I illustrates the interaction of value systems of groups who are concerned about the education of elementary school teachers. The series of interlocking ellipses is used to represent the interaction of values of groups such as boards of education, state departments of education, university faculty, citizens' groups, students, public school teachers and administrators, and vested interest groups such as the National Education Association, the American Federation of Teachers, and others. Implicit in each of these organizations is a set of values which indicates preferences of the members for certain types of learning experiences which are expected to occur in elementary schools. Sometimes these value systems have been expressed through statutes such as the school code or specific acts passed by a legislature. In other instances the values are not expressed as public law, but the impact of those values may be as persuasive as statutes passed by a legislature. For example, the widespread use of teacher strikes or sanctions is the embodiment of sets of values in conflict.

It should be apparent that these different systems are sometimes in direct opposition to one another and at other times they support or complement one another. The interlocking ellipses suggest that certain groups or organizations hold identical values. Indeed, the illustration suggests that members of one or more of the organizations may be the same person. For example, one could have a university faculty member who is a member of the NEA or the AFT and a participant in one of the active citizen groups seeking to improve the educational program in the schools.

In substance, the interaction of these value systems leads

FIG. X-1

INTERACTION OF VALUE SYSTEMS OF GROUPS CONCERNED WITH EDUCATION OF ELEMENTARY SCHOOL TEACHERS


UNIVERSITY FACULTY
VESTED INTEREST GROUPS
BOARDS OF EDUCATION
STUDENTS
STATE DEPT. OF EDUCATION
PUBLIC SCHOOL TEACHERS AND ADMINISTRATORS
BOARDS OF GOVERNORS
CITIZENS' GROUPS
UNIVERSITY MANAGEMENT CONCEIVES AND MAINTAINS PROCEDURES INTENDED TO IMPLEMENT THE POLICY DECISIONS
ADMISSION TO UNIVERSITY
UNDERGRAD LIBERAL EDUCATION
UNDERGRAD PROFESSIONAL EDUCATION
UNDERGRAD CLINICAL EXPERIENCE
UNDERGRAD DEGREE AND CERTIFICATE
POST-DEGREE CLINICAL EXPERIENCES
GRADUATE PROFESSIONAL EDUCATION
GRADUATE CLINICAL EXPERIENCE
GRADUATE LIBERAL EDUCATION

to the establishment of certain policies and the implementation of policy decisions by the university administration. Sometimes these policy decisions will be stated explicitly and receive wide publicity. On other occasions, the policy decisions may be made by default through failure of the groups to act or to agree. In any event, there is some policy operating in the university and this serves as a guide for the university management to conceive and maintain certain procedures which will enable them to implement the policy decisions which they perceive.

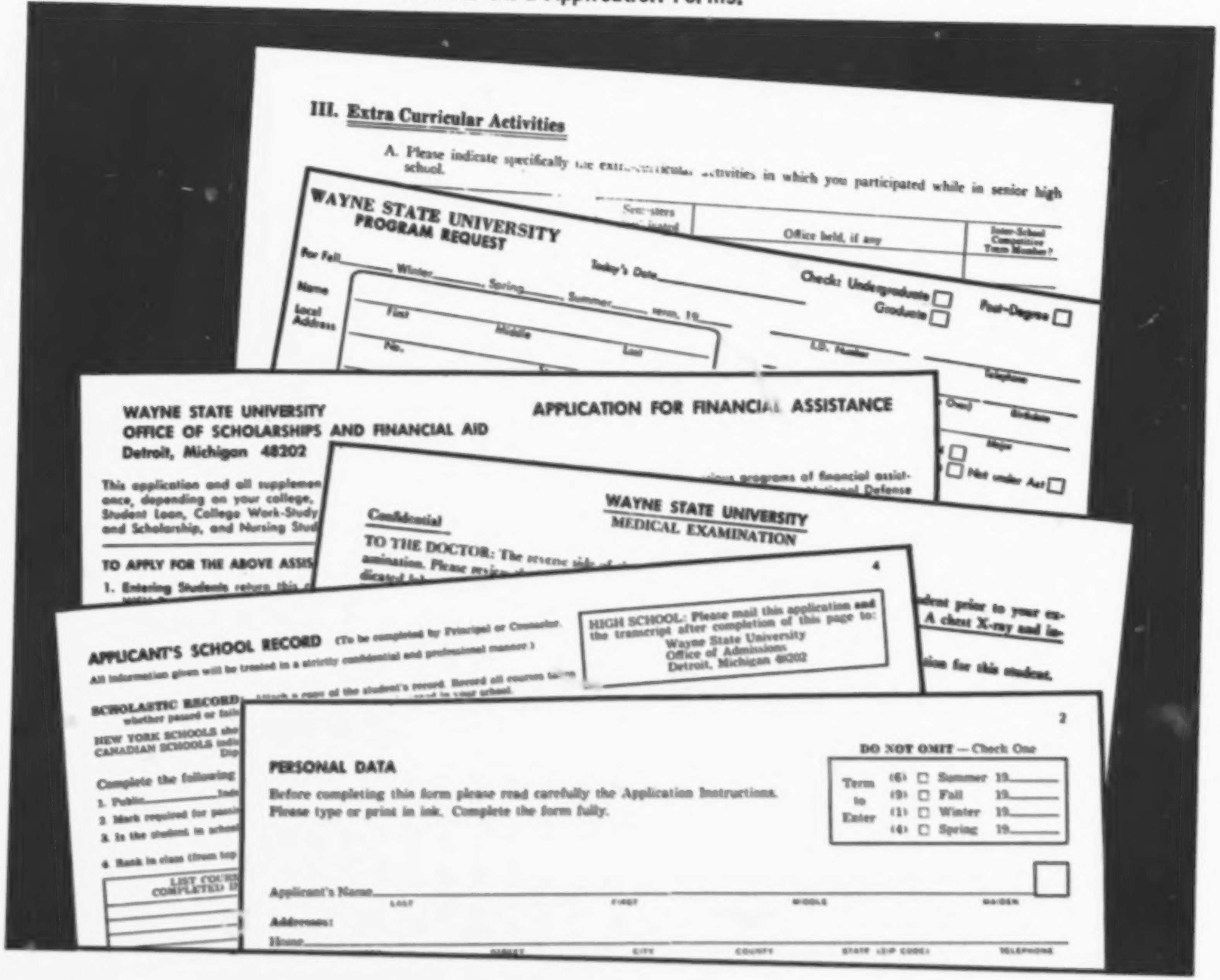
COLLECTING INFORMATION ABOUT STUDENTS.

In its turn, the university management establishes certain procedures or regulations which will enable the management to comply with the policy decisions which are perceived. Specifically, these regulations involve collecting information from all persons who seek admission to the university, whether they intend to enroll in the teacher education program or in some other division of the university. The university management also collects information which relates to the general liberal education of students classified as undergraduates, the professional education of its undergraduate students; and it specifies certain regulations which students must comply with in order to receive a degree from the university and to be recommended for certification to teach in the state. In Figure X-1, the arrows emerge from the management rectangle and spread out to the various boxes to indicate the broad categories of regulations which the university prescribes for its students and its faculty. Figure X-2 illustrates the various kinds of information collected relative to one of the categories, i.e., admission to the university. In applying for admission, the student provides information about himself and his character, cites personal references, agrees to undertake certain tests, and complies with other regulations which the university management requires.

Information is also gathered from the community where the student has attended high school and from counselors or other persons who have known him and can attest to the liklihood that he will do acceptable work at the university. In addition, the university generates information which is based upon the academic

FIG. X-2

Types of Information Collected from Students thru Application Forms.



III. Extra Curricular Activities

A. Please indicate specifically the extra-curricular activities in which you participated while in senior high school.

Semesters | Office held, if any | Inter-School Competitive Team Member?

WAYNE STATE UNIVERSITY
PROGRAM REQUEST

For Fall_____ Winter_____ Spring_____ Summer_____ term, 19_____

Today's Date_____

Check: Undergraduate ☐ Graduate ☐ Post-Degree ☐

Name: First Middle Last

Local Address: No.

I.D. Number

Telephone

Birthdate

Major

☐ ☐ Not under Act ☐

WAYNE STATE UNIVERSITY
OFFICE OF SCHOLARSHIPS AND FINANCIAL AID
Detroit, Michigan 48202

APPLICATION FOR FINANCIAL ASSISTANCE

This application and all supplemen
ance, depending on your college,
Student Loan, College Work-Study
and Scholarship, and Nursing Stud

programs of financial assist-
National Defense

TO APPLY FOR THE ABOVE ASSIS

1. Entering Students return this

Confidential

WAYNE STATE UNIVERSITY
MEDICAL EXAMINATION

TO THE DOCTOR: The reverse side of
amination. Please review
dicated b

dent prior to your ex-
A chest X-ray and in-

tion for this student.

4

APPLICANT'S SCHOOL RECORD (To be completed by Principal or Counselor.
All information given will be treated in a strictly confidential and professional manner.)

HIGH SCHOOL: Please mail this application and the transcript after completion of this page to:
Wayne State University
Office of Admissions
Detroit, Michigan 48202

SCHOLASTIC RECORD: Attach a copy of the student's record. Record all courses taken
whether passed or fail

NEW YORK SCHOOLS sho
CANADIAN SCHOOLS indi

Complete the following

1. Public_____ Inde
2. Mark required for passi
3. Is the student in school
4. Rank in class (from top

LIST COURS
COMPLETED I

2

PERSONAL DATA

Before completing this form please read carefully the Application Instructions.
Please type or print in ink. Complete the form fully.

DO NOT OMIT — Check One

Term to Enter
(6) ☐ Summer 19_____
(9) ☐ Fall 19_____
(1) ☐ Winter 19_____
(4) ☐ Spring 19_____

☐

Applicant's Name_____ LAST FIRST MIDDLE MAIDEN

Addresses:

Home_____ STREET CITY COUNTY STATE (ZIP CODE) TELEPHONE records of other students who have also attended the applicant's high school. This information provides the university admission officials with the basis for deciding upon the liklihood that a particular student will succeed in the university.

Figure X-1 indicates several other categories from which information is requested by the university management and provided by the participating students, by the university faculty, or information is generated by university departments. It should be apparent that a tremendously large volume of information is collected about each individual student during his entire period at the university. Since an information storage and retrieval system can be encumbered by having an excess of information about any single individual in the system, it will be necessary for the users of the system to define those elements which seem important and relevant to an understanding of the student's progress in the program and to make decisions that will help the student when he needs assistance. It will be necessary to collect only those elements of information and resist the temptation to collect all possible bits of information about all students.

Certainly, it is appropriate to re-examine periodically the kinds of information which are collected about any particular student, but it will be important for the university faculty implementing the Behavioral Science Elementary Teacher Education Program to be selective in the types of information which they choose to collect about any single student.

In the following sections, we have described some of the forms and procedures which may be used in establishing an information system which will be responsive to students participating in the program. We have also suggested specific ways in which the emphases of the program may be modified according to the expressed values of groups at a particular university.

ESTABLISHING AN INFORMATION SYSTEM FOR EXPERIENCE MODULES

MODULE CONCEPT

The project staff is committed to a concept of the teacher education program as a network of experience modules. This term, module, is derived from engineering technology and is commonly applied to complex systems of machines. A module is generally a small, self-contained segment of a larger system or machine. In practice, the specific contribution of each small module is known and the precise interaction of elements within the module is known.

The module concept is particularly useful when it becomes necessary to repair a complicated machine or modify a complex operating system. Corrective action often starts with tests of the output of major networks in the system until the defective network is identified. Subsequently, there would be checks of the output of each module in the network which was not delivering its expected output under the standard operating conditions.

When the malfunctioning module has been identified, its specific deficiency may be corrected or the entire module replaced. Since each module is self-contained, the corrective actions can be concentrated upon the defective modules, without the necessity of replacing an entire system.

In an analagous manner, the simplest modular unit in the teacher education program is defined as an "experience." Therefore, each "experience module" is conceived to be a self-contained entity which must have some measurable "input" as well as generating some measurable "output."

Table X-1 lists the major components which have been specified for each "experience module." The objectives are to be stated in behavioral terms so that the "output" of each module could be measured. The pre-requisites to each module specify the "input" conditions which should be established before the given experience module is initiated. When no pre-requisites are stated, the reader may assume that the initial admission of a student to the teacher education program is the implied prerequisite.

The experience category defines certain events or activities in which each student will participate. The experience is further

TABLE X-1

LIST OF ELEMENTS IN THE EXPERIENCE MODULE AND ELEMENTS USED TO CLASSIFY MODULES

A. Elements in Each Experience Module

1. Objectives of modules
2. Prerequisites to a given module
3. Experience described
4. Setting of the experience
5. Special materials required
6. Levels of maturity of pupils involved
7. Experience for generalist and/or specialist teachers
8. Approximate hours required
9. Evaluation of student's achievement of objective

B. Elements Used to Classify Modules

1. Components in teacher education program

    a. Liberal education in Humanities, Social Science, Natural Science, and Scholarly Modes of Inquiry
    b. Scholarly Modes of Knowledge in Fine Arts, Mathematics, Biological Sciences, Physical Sciences, Social Sciences, Linquistics, and Literature for Children
    c. Professional Uses of Knowledge in Mathematics, Science, Social Science, Reading, and Language Arts
    d. Human Learning
    e. Clinical Experiences
    f. Auxiliary Personnel in Education Program

2. Writer of the experience module
3. Date module was written
4. File terms for module
5. Identification number of module

explicated by identifying the special materials, instructional setting, approximate number of hours to complete the experience, and grade level where the experience is to occur.

The experience module is also described as appropriate for elementary school teachers who will be generalists and/or specialists in terms of the academic content which they will teach.

The evaluation segment of the experience module identifies the behavior or events which may be observed in order to determine whether the experience has enabled a student to achieve the specific objectives.

For purposes of organizing and classifying the experience modules, each module was classified according to some teacher education component, writer, date, and identification number for the module.

The components refer to the major academic divisions within the university which accept responsibility for the educational program of elementary school teachers. They are listed in abbreviated form under the components section in Table X-2. It should be noted that certain categories under components, i.e., modes of inquiry, human learning, auxiliary personnel, are not academic divisions but are the concern of faculty charged with the responsibility of specifying experiences in those areas which are judged to be essential for the education of elementary school teachers.

The term "writer" is intended to acknowledge authorship and professional competence of the person who had defined a specific experience module.

The date is intended to establish a base line in the chronology of changes which will occur within networks of modules over an extended period of time.

Finally, the file terms are used to provide rough classifications of the experience module within its component network.

Table X-2 shows the form which was used by the project members to define the major elements in the experience modules for students participating in the Behavioral Science Elementary Teacher

TABLE X-2

FORM USED TO DESCRIBE EXPERIENCE MODULES

ELEMENTARY TEACHER EDUCATION PROJECT

MICHIGAN STATE UNIVERSITY
EAST LANSING, MICHIGAN

NAME OF WRITER	DATE	PAGE
John L. Smith	6-17-68	74

COMPONENT (CHECK ONE BOX ONLY)

LIBERAL ED
☐ HUM
☐ SOC. SCI
☐ NAT. SCI
☐ MODES - INQUIRY

SCHOLARLY MODES OF KNOWLEDGE
☐ FINE ARTS
☐ MATH
☐ BIO SCI
☐ PHY SCI
☐ SOC SCI
☐ LINGUISTICS
☐ LIT FOR CHILD
☐

PROFESSIONAL USE OF KNOWLEDGE
☒ MATH
☐ SCI
☐ SOC SCI
☐ READ
☐ LANG ARTS

☐ HUMAN LEARN
☐ CLINICAL
☐ AUXILIARY PERSONNEL

EXPERIENCE MODULE: (WHAT IS ONE OF THE VALUABLE LEARNING EXPERIENCES OR ACTIVITIES WHICH YOU WOULD SPECIFY FOR THE PREPARATION OF A TEACHER?)

Complete a lesson plan for the class you are working with using the discovery techniques of Robert Davis and teaching Cartesian coordinates ..

SPECIAL MATERIALS REQUIRED

APPROXIMATE NUMBER STUDENT CLOCK HOURS TO COMPLETE THIS EXPERIENCE? 1-1/2

THIS EXPERIENCE SPECIFIED FOR (CHECK ONE BOX FROM EACH LIST)
☐ GENERALIST
☐ SPECIALIST
☒ ALL CANDIDATES

☐ PRE-SCH.-K
☐ GRADES 1-4
☐ GRADES 5-8
☒ ALL GRADES

INSTRUCTIONAL SETTING
☐ LARGE GROUP
☒ INDEPENDENT
☐ SMALL GROUP (1-12 STUDENTS)
☐ OTHER (SPECIFY)__________

HOW FILED

OBJECTIVES: (WHAT IS THIS EXPERIENCE DESIGNED TO ACCOMPLISH?)

The student can write a lesson plan which provides for discovery learning

PREREQUISITES: (WHAT ARE THE MOST IMPORTANT ONE, TWO, OR THREE COMPETENCIES OR EXPERIENCES BEFORE WORKING ON THIS OBJECTIVE?)

Previous Module 73

EVALUATION: (WHAT WILL TEST WHETHER OR NOT THE STUDENT HAS INDEED ACHIEVED THE OBJECTIVES OF THIS MODULE?)

Examine lesson plan for; a) inclusion of discovery technique.
b) appropriatness for children being taught, c) creativity of approach
d) completeness of plan

OFFICE COPY

Education Program. A hypothetical experience module is presented in the table and it will be discussed in a later section.

ESTABLISHING AN INFORMATION SYSTEM

As indicated in the preceding remarks, the Behavioral Science Elementary Teacher Education Program is composed of a network of experience modules, which indicate the discrete experiences which the university faculty believe should characterize the program for elementary school teachers.

Each of the modules is presented as a narrative description and represents the value judgements of one or more members of the university faculty. Most of the modules were designed by the project staff within a period of approximately 60 to 90 days; and it was expected that the modules would be altered and reconsidered when the entire collection had been completed and the program made operational. This collection of experience modules was considered as merely an initial step in a model teacher education program which would evolve.

In order to record these value judgements explicitly and to provide for this evolution of the program, it was essential to create an information system to store and retrieve the statements in the modules. Such a system should make it possible to identify interrelationships among the modules prepared by faculty members in related disciplines, e.g., faculty in the liberal education component who were concerned with natural sciences would be able to relate their thinking to the ideas of faculty in the professional education program who were specifically concerned with the professional uses of knowledge in science education.

The information storage and retrieval system should be capable of handling alphameric data and to process this at a rapid rate. The system should be capable of examining natural language and conducting categorical and/or logical searches among the documents or searching for main ideas within a given document.

One of the main components in the project's information system was the Basic Index and Retrieval System (acronym is BIRS) which was developed by Professor John Vinsonhaler and his colleagues at Michigan State University[1]. A discussion of the major functions of the BIRS programs is beyond the purpose of this paper. However, the reader may refer to the preceding references in order to amplify his understanding of the capabilities of this system. Essentially, it contains most of the computer programs which will conduct logical searches and enable a user to store and retrieve alphameric information with considerable ease and speed. This system has served as the basis for the information storage and retrieval system which supports the Behavioral Science Elementary Teacher Education Program.

It is apparent that the project staff has a special interest in BIRS, since it was developed at Michigan State University, However, it should be noted that other systems are available to process alphameric information[2]. Depending upon the hardware and software available to a potential user, the BIRS programs and/or one of the alternate systems may be utilized in a similar fashion to store and retrieve the experience modules which have been defined in this project.

Figure X-3 is a flowchart representing the major stages in the BIRS application to the experience modules defined in the project. As shown in the exhibit, the initial step was to create a form which would provide some modest structure to assist faculty in organizing their ideas, and to avoid the onus of being too restrictive, stiffling, and an obstacle to creative thinking by the faculty. The next step was to secure the judgements of the faculty about the important teacher education experiences and have those views

---

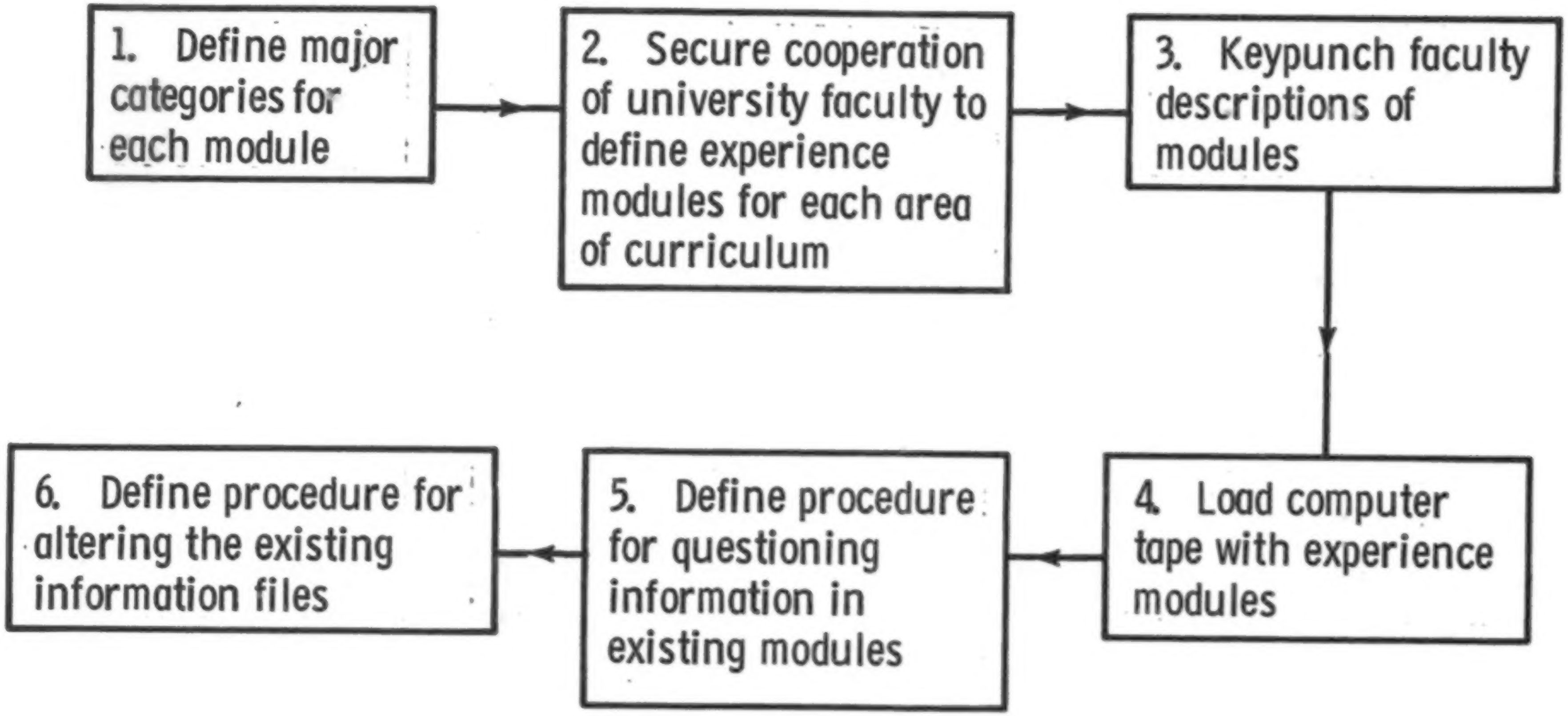
[1] John F. Vinsonhaler, "Improving the Accessibility of Educational Materials;" U.S.O.E. Proj. No. 5-1144, October, 1967.

John F. Vinsonhaler, Technical Manual Basic Indexing and Retrieval System, (BIRS 2.0); Learning Systems Institute, Michigan State University, East Lansing, January, 1968.

[2] Cuadra, Carlos A.; Annual Review of Information Science and Technology (Vol. 1); Interscience Publishers, New York, 1966.

FIG. X-3

MAJOR STAGES IN APPLICATION OF BIRS TO EXPERIENCE MODULES


1. Define major categories for each module
2. Secure cooperation of university faculty to define experience modules for each area of curriculum
3. Keypunch faculty descriptions of modules
4. Load computer tape with experience modules
5. Define procedure for questioning information in existing modules
6. Define procedure for altering the existing information files

expressed in a form which was compatible with BIRS. The third step was to have the information keypunched and loaded onto computer tape for subsequent analysis.

Once this curriculum of experience modules had been loaded onto the Control Data Corporation 3600 System at MSU, it would be possible to examine the collection of documents to identify similarities in the kinds of ideas, experiences, objectivies, evaluation devices, and materials which the faculty were recommending for elementary school teachers. One could identify gaps or deficiencies which occurred within a given component or across components.

It was also possible to modify one or more of the experience modules with relative ease by adding or removing one or more of the lines within a given module. There are obvious advantages to a curriculum which can be easily revised and printed within a short period of time.

Establishing a written document had the added advantage of forcing faculty members to specify some statement of behavioral objectives for teacher education and to specify ways in which these objectives could be observed and evaluated. An intensive evaluation of any given module may reveal it to be an excellent one or it may be very superficial. The important point is that some explicit assertion has been made that a specific experience is important, and that this assertion is open to critical examination and revision.

COMPUTER LISTING OF EXPERIENCE MODULES

Table X-3 shows the major categories or fields in a typical experience module as they are listed by the computer. An asterisk precedes the discriptor of each field. For example, "*WRITER" is a major field; and in the example cited, the writer is Smith, John L. In the sample, the experience module was written on the June 17, 1968, and it is module "*NUMBER 74". The "*COMPONENT" is concerned with the Professional Use of Knowledge and in particular with respect to mathematics. The sample indicates that no

TABLE X-3

COMPUTER LISTING OF EXPERIENCE MODULE

```
500     *WRITER         SMITH, JOHN L                                                00001  1
        *DATE           6-17-68                                                      00001  2
        *NUMBER         74                                                           00001  3
        *COMPONENT      PROFESSIONAL USE OF KNOWLEDGE   -   MATH                     00001  4
        *MATERIALS      NONE                                                         00001  5
        *HOURS          1 1/2                                                        00001  6
        *GENERAL        ALL CANDIDATES                                               00001  7
        *LEVEL          ALL GRADES                                                   00001  8
        *FILE           LESSON PLANNING  DISCOVERY TEACHING  CARTESIAN               00001  9
                        COORDINATES
        *SETTING        INDEPENDENT                                                  00001 10
        *EXPERIENCE     COMPLETE  A LESSON PLAN FOR THE CLASS YOU ARE WORKING        00001011
                        WITH USING THE DISCOVERY TECHNIQUES OF ROBERT DAVIS AND      00001012
                        TEACHING CARTESIAN COORDINATES.                              00001013
        *OBJECTIVES     THE STUDENT CAN WRITE A LESSON PLAN WHICH PROVIDES FOR       00001014
                        DISCOVERY LEARNING.                                          00001015
        *PREREQUISITES  PREVIOUS MODULE  73                                          00001016
        *EVALUATION     EXAMINE LESSON PLAN FOR (A) INCLUSION OF DISCOVERY           00001017
                        TECHNIQUE (B) APPROPRIATENESS FOR CHILDREN BEING TAUGHT      00001018
                        (C) CREATIVITY OF APPROACH (D) COMPLETENESS OF PLAN.          00001019
                                                                                     00001020
```

special "*MATERIALS" are required and the experience will require approximately 1 1/2 hours to complete. The category "*GENERAL" indicates that the experience is appropriate for all candidates, whether they are preparing to be general elementary school teachers or to specialize in teaching some particular subject area in the elementary school. The "*LEVEL" indicates that the experience is appropriate for pupils teaching in all grades of the elementary school. The author lists certain "*FILE" terms, which are "lesson planning, discovery teaching, Cartesian coordinates." The author suggests that the "*SETTING" is intended to be an independent activity conducted by the student. The specific "*EXPERIENCE" cited by the author is to complete a lesson plan for the class using some of the discovery techniques of Robert Davis in teaching Cartesian coordinates. The "*OBJECTIVE" of the experience is to enable the student to write a lesson plan which provides for discovery learning. The "*PRE-REQUISITES" for this particular module refer to the requirement that the student must have successfully completed the previous Module 73. "*EVALUATION" of the student's effort is to be an examination of the lesson plan which the student has prepared for each of the following: "Inclusion of discovery technique, appropriateness for children taught, creativity of approach, completeness of plan."

In the upper left hand corner of the exhibit, the numeral "3" refers to the access number assigned by BIRS and the numeral "500" refers to the number of words reserved for this abstract. On the right hand side of the module, there is an 8 digit numeral. From the right side, the initial 3 digits refer to each of the lines in the module. The next five digits refer to the module number. The vertical sequence of 1's indicates that all of these lines belong to module 1.

RECOMMENDED CHANGES IN EXPERIENCE MODULES

Table X-4 shows a form which is used to add or remove modules and to modify modules stored on computer tape. It is similar to the form used to identify the elements in each experience module and to classify the modules. However, the form has been changed to indicate the name and title of the writer as

9

TABLE X-4

SAMPLE FORM TO USE FOR RECOMMENDING CHANGES IN EXPERIENCE MODULES

RECOMMENDED CHANGES IN EXPERIENCE MODULE FOR ELEMENTARY TEACHERS

MICHIGAN STATE UNIVERSITY
EAST LANSING, MICHIGAN

Name and Title of Writer	DATE	Module No.

COMPONENT (CHECK ONE BOX ONLY)

LIBERAL ED	SCHOLARLY MODES OF KNOWLEDGE		PROFESSIONAL USE OF KNOWLEDGE	
☐ HUM	☐ FINE ARTS	☐ SOC SCI	☐ MATH	☐ HUMAN LEARN
☐ SOC. SCI	☐ MATH	☐ LINGUISTICS	☐ SCI	☐ CLINICAL
☐ NAT. SCI	☐ BIO SCI	☐ LIT FOR CHILD	☐ SOC SCI	☐ AUXILIARY PERSONNEL
☐ MODES - INQUIRY	☐ PHY SCI	☐	☐ READ	
			☐ LANG ARTS	

EXPERIENCE MODULE: Describe the experiences and activities explicitly and include those changes which you recommend for the preparation of a teacher

SPECIAL MATERIALS REQUIRED

APPROXIMATE NUMBER STUDENT CLOCK HOURS TO COMPLETE THIS EXPERIENCE? ____________

THIS EXPERIENCE SPECIFIED FOR (CHECK ONE BOX FROM EACH LIST)

☐ GENERALIST	☐ PRE-SCH.-K
☐ SPECIALIST	☐ GRADES 1-4
☐ ALL CANDIDATES	☐ GRADES 5-8
	☐ ALL GRADES

INSTRUCTIONAL SETTING

☐ LARGE GROUP ☐ SMALL GROUP (1-12 STUDENTS)
☐ INDEPENDENT ☐ OTHER (SPECIFY)____________

HOW FILED

OBJECTIVES: (WHAT IS THIS EXPERIENCE DESIGNED TO ACCOMPLISH?)

PREREQUISITES: (WHAT ARE THE MOST IMPORTANT ONE, TWO, OR THREE COMPETENCIES OR EXPERIENCES BEFORE WORKING ON THIS OBJECTIVE?)

EVALUATION: (WHAT WILL TEST WHETHER OR NOT THE STUDENT HAS INDEED ACHIEVED THE OBJECTIVES OF THIS MODULE?)

CHANGE AUTHORIZED BY ____________________

OFFICE COPY

well as the module number which is suggested for change or variation. Another change in the format refers to the "*EXPERIENCE" category, in which the writer is asked to describe the specific experiences and activities he is recommending for the particular module. At the bottom of the page there is provision for some responsible faculty member or administrator to authorize the alteration of a given experience module.

Figure X-4 indicates the relationship between the initial 2600 experience modules which have been stored on computer tape and the update form which may be used to modify one or more of the experience modules.

COMPLEXITY OF THE NETWORK OF COMPONENTS AND MODULES

Table X-5 provides some indication of the complexity of the network of components included in the program. As shown in that table, the General Liberal Education component has four members, i.e., Humanities, Social Sciences, Natural Sciences, and Modes of Inquiry. However, the experiences which students will have within the General Liberal Education portion of the program will not occur in isolation. Indeed, the students should seek to identify similarities, differences and contradictions within the experiences provided by the General Liberal Education component as well as any of the experiences provided under the aegis of Scholarly Modes of Knowledge, Professional Use of Knowledge, Human Learning, Clinical, and Auxiliary Personnel components.

Considered separately, there is a substantially large number of total possible combinations of components, i.e., total of 161 possible combinations of components. However, Table X-5 indicates that when one considers the number of possible relationships which may exist in the experience modules which are provided by all components in the program, the total exceeds 500,000 possible combinations of components. Now, let's complicate the picture.

Each component includes 25 to 225 separate experiences. Moreover, each experience has been defined in terms of at least

TABLE X-5

NUMBER OF POSSIBLE COMBINATIONS OF COMPONENTS WITHIN MAJOR SEGMENTS OF PROGRAM

A. General Liberal Education Components:
Four members (Humanities; Social Science; Natural Science; Modes of Inquiry)
Four members arranged in possible combinations of two or more . . . . 11 combinations.

B. Scholarly Modes of Knowledge Components:
Seven members (Fine Arts; Mathematics; Physical Science; Social Sciences, Linquistics , Literature for Children)
Seven members arranged in possible combinations of two or more . . . . 120 combinations.

C. Professional Use of Knowledge Components:
Five members (Mathematics; Science; Social Science; Reading; Language Arts)
Five members arranged in possible combinations of two or more . . . . 26 combinations.

D. Human Learning, Clincial, Auxiliary Personnel Components:
Three members arranged in possible combinations of two or more . . . . 4 combinations.

Total possible combinations for A-D
. . . . 161 combinations

E. General Liberal Education and Scholarly Modes of Knowledge Components:
Eleven members in possible combinations of two or more . . . . 2036 combinations

F. General Liberal Education, Scholarly Modes of Knowledge, and Professional Use of Knowledge Components:

TABLE - X-5 - CONT.

Sixteen members in possible combinations of two or more . . . . 65,522 combinations

G. General Liberal Education, Scholarly Modes of Knowledge, Professional Use of Knowledge, Human Learning, Clinical, Auxiliary Personnel Components:

Nineteen members in possible combinations of two or more . . . . 524,268 combinations

---

Total possible combinations for E-G . . . . 591,826 combinations

---

nine parameters, i.e., events in the experience, objectives, prerequisites, materials required, for generalist or specialist teacher, for grade or age level, in some instructional setting, clock hours to accomplish, and to be evaluated in some manner.

Finally, there is the addditional difficulty of establishing reasonably accurate communication among persons who have conceived and described the experience modules, persons who will seek to implement the program of modules and students who will participate in the program.

INFORMATION SYSTEM TO RELATE STUDENT EFFORT TO EXPERIENCE MODULES

ESTABLISHING STUDENT RECORD FILE

It is obvious that an elaborate record system would be necessary in order to encompass the pattern of experiences, successes, and failures which will characterize each student's participation in the project. The information processing power of the computer is to be utilized to establish a student record system to trace the progress of the students in the program. Such a student record system is not intended to include all pieces of information about each student and each of his experience modules. As mentioned previously, there is a hazard in having too much information as well as a hazard in not having enough relevant information to make an adequate decision.

Prototype forms which may be used to collect information about students' successes and difficulties in the various modules are suggested in the following sections. These forms are to be used to sketch a pattern of the salient aspects of a student's progress through the experience modules and to provide some procedures to follow in recommending changes in modules or in student's efforts in the program.

STUDENT PROGRESS REPORTS (ANECDOTAL FORM)

The form shown in Table X-6 may be used by faculty and

TABLE X-6

STUDENT PROGRESS REPORT (ANECODOTAL FORM)*

1) Student's Name Johnson, Bill Date 10 (MO 25 DAY 68 YR)

2) Writer's Name Brown, Thomas Writer's Title Asst. Prof. of Educ.

3) Component: ( ) Human Learn (x) Clinical ( ) Auxilliary Personnel

Liberal Education	Scholarly Modes of Knowledge		Professional Use of Knowledge
( ) Human	( ) Fine Arts	( ) Linguistics	( ) Math
( ) Soc Sci	( ) Math	( ) Soc Sci	( ) Sci
( ) Nat Sci	( ) Bio Sci	( ) Lit for Child	( ) Soc Sci
( ) Modes-Inquiry	( ) Phy Sci		( ) Read
			( ) Lang Arts

4) Setting: (x) Elem School, ( ) College, ( ) Community

5) Grade Level Involved: ( ) Pre-Sch-K; ( ) 1-3; (x) 4-6; ( ) 7-9; ( ) Undergraduate; ( ) Graduate

6) Writer's Evaluation or Comments: Mr. Johnson is enthusiastic about teaching science, but he tends to present ideas which are too complex for these pupils. He's teaching certain generalizations about light. He brings mirrors, lenses, and other apparatus from his own collection of teaching materials. He tends to give answers to the children rather than encourage them to search for answers.

His work is carefully planned and he responds well to suggestions from me and the cooperating teacher.

There's some tendency to loose control of the class, when the science lesson runs overtime.

7) Is student meeting minimum requirements in areas specified above?
(x) Yes ( ) No

8) Writer's Recommendations: I'll tape record one of his science lessons and discuss it with him. He's pretty sharp. I think that he will be able to identify some of his difficulties. I suggest that he attempt to teach fewer generalizations and that he provide more opportunities for many pupils to participate actively, not just receive instruction.

9) Module 0176

*Form used for narrative comments or evaluations by University faculty or professional educators in Elementary School Districts

TABLE X-7

COMPUTER PRINTOUT OF SAMPLE PROGRESS REPORT IN

BIRS FORMAT (ANECDOTAL)

```
*STUDENT        JOHNSON, BILL  322145
*DATE           10-25-68
*WRITER         BROWN, THOMAS
*TITLE          ASST. PROF. OF EDUCATION
*COMPONENT      CLINICAL
*SETTING        ELEM SCHOOL
*LEVEL          4-6
*EVALUATION     MR. JOHNSON IS ENTHUSIASTIC ABOUT TEACHING SCIENCE, BUT
                HE TENDS TO PRESENT IDEAS WHICH ARE TOO COMPLEX FOR THESE
                PUPILS.  HE-S TEACHING CERTAIN GENERALIZATIONS ABOUT
                LIGHT.  HE BRINGS MIRRORS, LENSES, AND OTHER APPARATUS
                FROM HIS OWN COLLECTION OF TEACHING MATERIALS.  HE TENDS
                TO GIVE ANSWERS TO THE CHILDREN RATHER THAN ENCOURAGE
                THEM TO SEARCH FOR ANSWERS.
                HIS WORK IS CAREFULLY PLANNED AND HE RESPONDS WELL TO
                SUGGESTIONS FROM ME AND THE COOPERATING TEACHER.
                THERE-S SOME TENDENCY TO LOOSE CONTROL OF THE CLASS,
                WHEN THE SCIENCE LESSON RUNS OVERTIME.
*MINIMUM        YES
*RECOMMEND      I-LL TAPE RECORD ONE OF HIS SCIENCE LESSONS AND DISCUSS
                IT WITH HIM.  HE-S PRETTY SHARP.  I THINK THAT HE WILL BE
                ABLE TO IDENTIFY SOME OF HIS DIFFICULTIES.  I SUGGEST THAT
                HE ATTEMPT TO TEACH FEWER GENERALIZATIONS AND THAT HE
                PROVIDE MORE OPPORTUNITIES FOR MANY PUPILS TO PART-
                ICIPATE ACTIVELY, NOT JUST RECEIVE INSTRUCTION.
```

other persons working with the prospective teachers to provide a reaction to the student's success in achieving the behavioral objectives of any one of the experience modules. The sample case in Table X-6 refers to a hypothetical student named Bill Johnson and a hypothetical Assistant Professor of Education named Thomas Brown. The progress report occurred on October 25, 1968, and was concerned specifically with the "*CLINICAL" phase of the program. The "*SETTING" for the experience was an elementary school and it occurred with children in grade "*LEVELS" 4 through 6. The "*WRITER" (Prof. Brown) indicated in his "*EVALUATION" that Bill Johnson was enthusiastic in his work in teaching science, but tended toward ideas that were too complex for the pupils. He offered several suggestions to help the student. Item 7 in the progress report indicates that, in the judgement of Mr. Brown, the student is meeting the "*MINIMUM" requirements for this particular module. Item 8 indicates "*RECOMMENDATIONS" which Mr. Brown has made to assist the student to correct the difficulties. Item 9 provides a specific identification of the "*MODULE" to which these remarks have been relevant.

Table X-7 provides a computer listing of the hypothetical report of Prof. Brown regarding a clinical experience module for Bill Johnson. Once again the BIRS set of programs made it possible to accept the natural language of the anecdotal form, transform the remarks onto computer tape for later retrieval and/or analysis.

STUDENT PROGRESS REPORT (TEST SCORES/GRADES)

The report shown in Table X-8 also refers to the hypothetical student, Bill Johnson, and it was written on July 30, 1968. However, this form is intended for use in reporting test scores, grades, or similar categorical ratings which are compatible with statistical analyses not included in the BIRS programs. The hypothetical "*WRITER" is Robert Harrison who is an Assistant Professor of Physics and the "*COMPONENT" is concerned with the natural sciences in the liberal education program. The "*SETTING" for the report is at a college level and no grade "*LEVEL" was involved. Item number 6 indicates that the "*SUBJECT" area was concerned with light energy and laboratory reports.

TABLE X-8

STUDENT PROGRESS REPORT (TEST SCORES, GRADES)*

1) **Student's Name** Johnson, Bill 322145 **Date** 7 (MO 30 DAY 68 YR)

2) **Writer's Name** Harrison, Robert **Writer's Title** Asst.Prof.Physics

3) **Component:** ( ) Human Learn ( ) Clinical ( ) Auxilliary Personnel

Liberal Education	Scholarly Modes of Knowledge		Professional Use of Knowledge
( )Human	( )Fine Arts	( )Linguistics	( )Math
( )Soc Sci	( )Math	( )Soc Sci	( )Sci
(X)Nat Sci	( )Bio Sci	( )Lit for Child	( )Soc Sci
( )Modes-Inquiry	( )Phy Sci		( )Read
			( )Lang Arts

4) **Setting:** ( ) Elem School, (X) College, ( ) Community

5) **Grade Level Involved:**
( ) Pre-Sch-K; ( ) Grades 1-4; ( ) Grades 5-8; ( ) All Grades

6) Subject Area:	Rating Percent or Grade
Lectures on Light Energy	C
Lab Reports:	
#1 Reflection of light	C
#2 Refraction of light	D
#3 Colored light, colored pigment	C
Lectures on Scientific Method	C-
Deductive and inductive reasoning	10%
Generating plausible hypotheses	60%
Defining procedures to test hypotheses	50%

7) **Is student meeting minimum requirements in areas specified above?**
(X) Yes ( ) No

8) **Writer's Recommendation:**
The student needs to invest the time to read and think about how he has arrived at the conclusions or opinions which he holds. Specifically, he should do additional study about deduction, induction, and their interrelationships.

9) **Module 0314**

*Form used for Test Scores or other categorical evaluations by faculty or professional educators in Elementary School Districts

TABLE X-9

COMPUTER LISTING OF TEST SCORES/GRADES FOR MODULE 314

```
*STUDENT       JOHNSON, BILL  332145
*DATE          7-30-68
*WRITER        HARRISON, ROBERT
*TITLE         ASST. PROF. PHYSICS
*COMPONENT
*SETTING       COLLEGE
*LEVEL
*SUBJECT       LECTURES ON LIGHT ENERGY                        C
               LAB REPORTS
               NO.1 REFLECTION OF LIGHT                        C
               NO.2 REFRACTION OF LIGHT                        D
               NO.3 COLORED LIGHT, COLORED PIGMENT             C
               LECTURES ON SCIENTIFIC METHOD                   C
               DEDUCTIVE AND INDUCTIVE REASONING              10
               GENERATING PLAUSIBLE HYPOTHESES                60
               DEFINING PROCEDURES TO TEST HYPOTHESES         50
*MINIMUM       YES
*RECOMMEND     THE STUDENT NEEDS TO INVEST THE TIME TO READ AND THINK
               ABOUT HOW HE HAS ARRIVED AT THE CONCLUSIONS OR OPINIONS
               WHICH HE HOLDS.  SPECIFICALLY HE SHOULD DO ADDITIONAL
               STUDY ABOUT DEDUCTION, INDUCTION, AND THEIR INTERRELA-
               TIONSHIP.
```

The professor has assigned letter grades to Bill Johnson's achievement in the lab reports and in the general lecture on that topic. He has assigned a grade for lectures on the scientific method and has provided percentile ratings for Bill Johnson on deductive and inductive reasoning, generating plausible hypotheses, and defining procedures to test the hypotheses. Item 7 indicates that in the judgement of the writer, Bill Johnson is meeting "*MINIMUM" requirements in the subject area. Item 8 enables the writer to offer his "*RECOMMENDATION" for the student to improve upon his present level of achievement. Item number 9 indicates that the preceding remarks refer to "*MODULE" 314.

Table X-9 provides a computer listing of the hypothetical report of Professor Harrison regarding Bill Johnson's work in natural sciences. The BIRS Programs will accept the test and/or grade scores, but the statistical analysis of these data will be performed by standard statistical subroutines not available in the BIRS package.

STUDENT REACTIONS TO EXPERIENCES IN THE PROGRAM

The sample shown in Table X-10 continues with the hypothetical student Bill Johnson and was reported on August 13, 1968. This form is intended to provide the student with an opportunity to react to the experience modules. It indicates that the student reacted to the introduction to physical science modules, in the General Liberal Education portion of the program. Items 3 and 4 show that the activity occurred at the college and that the major events in this experience module were essentially attending lectures, quiz sections, and periodic laboratory sessions. In item 5 Bill Johnson stated that he didn't know whether or not he was successful in participating in this particular activity. Item 6 indicates that he is uncertain how to answer the question and so he modified the categorical responses which are offered on the form, i.e., "yes" or "no." This is one of the advantages of BIRS which has the capacity to accept categorical ratings or natural language comments such as the one offered by Bill Johnson. Item 7 provides opportunities for the student to express recommendations for modifying or altering the experience module. This kind of feedback should have considerable influence upon

TABLE X-10

STUDENT REACTIONS TO EXPERIENCES IN LIBERAL EDUCATION OR PROFESSIONAL EDUCATION (ANECODOTAL FORM)*

1) Student's Name Johnson, Bill Date 8 (MO 13 DAY 68 YR)

2) Identify specific subject or experience involved:

X Liberal Education Introduction to Physical Science Modules

_____ Professional Education

3) Where did the activity occur?

X College _____ Community _____ Elementary Sch

4) What were the major events in this experience?

Attend lectures on different physical science subjects (light, heat, sound). There were quiz sections once a week and a 3 hour lab every other week.

5) Were you successful in participating in the activity? __Yes, __NO, Don't Know

6) Was the experience helpful to you? X Yes, X No Some parts were interesting and others weren't.

7) With respect to this experience, what do you recommend?

There's too much content to cover in a single quarter. The lectures sometimes had nothing to do with what happened in the lab period or what we discussed in the quiz sections. It was hard to pull it all together. I recommend that the lectures, quiz, and labs be coordinated on one topic and that enough time be given that one topic to cover it thoroughly. Also the textbook is a waste of money.

8) Modules 314-378

---

*Form used for narrative comments or evaluations by students

TABLE X-11

COMPUTER PRINTOUT OF SAMPLE STUDENT REACTION FORM FOR MODULES 314-378

```
*STUDENT        JOHNSON, BILL  322145
*DATE           8-13-68
*EXPERIENCE     LIBERAL EDUCATION  PHY. SCI. 191 INTROD. TO PHY. SCI.
*SETTING        COLLEGE
*EVENTS         ATTEND LECTURES OF DIFFERENT PHYSICAL SCIENCE SUBJECTS
                (LIGHT, HEAT, SOUND).  THERE WERE QUIZ SECTIONS ONCE A
                WEEK AND A 3 HOUR LAB EVERY OTHER WEEK.
*SUCCESS        (ALTER)  DON-T KNOW
*HELPFUL        (ALTER)  SOME PARTS WERE INTERESTING AND OTHERS WEREN-T.
*RECOMMEND      THERE-S TOO MUCH CONTENT TO COVER IN A SINGLE QUARTER.
                THE LECTURES SOMETIMES HAD NOTHING TO DO WITH WHAT
                HAPPENED IN THE LAB PERIOD OR WHAT WE DISCUSSED IN THE
                QUIZ SECTIONS.  IT WAS HARD TO PULL IT ALL TOGETHER.
                I RECOMMEND THAT THE LECTURE, QUIZS, AND LABS BE COOR-
                DINATED ON ONE TOPIC AND THAT ENOUGH TIME GE GIVEN THAT
                ONE TOPIC TO COVER IT THOROUGHLY.  ALSO THE TEXTBOOK IS A
                WASTE OF MONEY.
```

revisions of the experience modules in the program.

This is not to say that the experience module should be modified exactly as Bill Johnson says it should be modified. On the other hand, student reactions should provide impetus for the research component in the teacher education program to initiate studies to determine if the views of students like Bill Johnson have sufficient merit to justify alterations in the experience modules. Essentially, it should be an impartial researcher who collects evidence to determine whether or not the experience module should be altered, removed, or left intact. The weight of relevant evidence should be the final arbiter of that decision.

Table X-11 shows a sample of the student reaction form as it might appear in the computer listing.

NORMATIVE INFORMATION GENERATED BY A UNIVERSITY DEPARTMENT

Table X-12 provides a general form which is used by departments within the university to report normative information about students. Item 1 identifies a report relevant to Bill Johnson and was submitted on August 17, 1968, by the Counseling and Testing Department of the University. Item 3 indicates that the source of the normative information was a standardized test, STEP, Form B, Level 1. Items 4 and 5 are blank; therefore, it is inferred that Bill Johnson did not score in the high or low 15% of comparable college students on anything measured by the test. Item 6 refers to a profile which is coded with Bill Johnson's indentification number 322145.

Table X-13 shows a computer printout of the sample of normative information generated by the Counseling and Testing Department for Bill Johnson. The document cited in the STEP test, Level 1, and it lists the percentile rating for Bill Johnson in mathematics, physical sciences, biological sciences, English, and social sciences. The interpretation at the bottom of Table X-13 is given in order to help the reader to determine the meaning of the percentile score.

TABLE X-12

NORMATIVE INFORMATION
GENERATED BY A UNIVERSITY DEPARTMENT

1) Student Name Johnson, Bill Date 8 17 68 (MO DAY YR)

2) Department of University reporting Counseling and Testing

3) Source of Normative Information:

X Standardized Tests (STEP, FORM B, LEVEL 1)

____Letter Grades

____Department Reports

____Other (please specify)

4) Subject area where student is in lowest 15% of comparable college students.

5) Subject area where student is in highest 15% of comparable college students.

6) Recommendations: See attached profile (Document 322145)

TABLE X-13

COMPUTER PRINTOUT OF SAMPLE OF NORMATIVE INFORMATION GENERATED BY UNIVERSITY

```
*STUDENT       JOHNSON, BILL  322145
*DATE          8-17-68
*DEPARTMENT    COUNSELING AND TESTING
*SOURCE        STANDARDIZED TEST, STEP, FORM 1
*LOW15         BLANK
*HIGH15        BLANK
*RECOMMEND     SEE ATTACHED PROFILE (DOCUMENT 332145)
*STUDENT       JOHNSON,  BILL 322145
*DATE          8-10-68
*DOCUMENT      322145
*TEST          STEP TEST, FORM 1
               MATHEMATICS                                 23
               PHYSICAL SCIENCES                           21
               BIOLOGICAL SCIENCES                         30
                ENGLISH                                    79
               SOCIAL SCIENCES                             62
               INTERPRETATION -- THE STUDENT IS IN THE 23RD PERCENTILE
               OF SCORES ON THE MATHEMATICS SECTION OF THE STEP TEST,
               FORM 1. THIS MEANS THAT 800/O OF ALL COLLEGE FRESHMEN WHO
               TOOK THIS TEST SCORED HIGHER THAN THE STUDENT ABD 190/O
               OF THE FRESHMEN SCORED LOWER THAN THE STUDENT.
```

RELATIONSHIP OF COMPUTER TAPES AND UPDATE FORMS

Figure X-4 shows the tape of student records as it is influenced by update information provided by faculty, students, and university departments. At the bottom of the exhibit, the tape of experience modules is modified by recommended changes from faculty and other authorized persons. It should be understood that the information on each form is keypunched so that its form will be compatible with the BIRS computer tape system.

Figure X-5 indicates the relationship between the update procedures for the tape file of student records and the update procedures for the experience modules. It also indicates the relationship of the faculty to those procedures and to the files. Specifically, faculty may provide information to alter the record of a student and they may recommend changes in the experience modules. They may also provide information for the student file and the experience module file, ask questions of either one of the tape files, and expect to receive answers from the system.

Figure X-6 extends the relationship shown previously and indicates that students may also provide suggestions and information which will modify their own student record tape file as well as recommend modifications in one or more of the experience modules. In addition, the exhibit suggests that students should also have the option of asking questions of the various experience modules and expect answers from the system. The illustration suggests that the students should also have the option of asking questions of their own record file and to anticipate appropriate answers.

Figure X-6 illustrates the overall relationship among the two tape files, the update procedures, and the option of faculty and students to query the system. The information system available to students and faculty shown in Figure X-6 is rather elementary. If financial and human resources are available, then the university may increase the complexity of the tape files as well as storage and retrieval aspects of the information system. This illustration serves as a prototype of a much more elaborate

FIG. X-4
RELATIONSHIP OF TAPE OF STUDENT RECORDS AND EXPERIENCE MODULES TO UPDATE FORMS

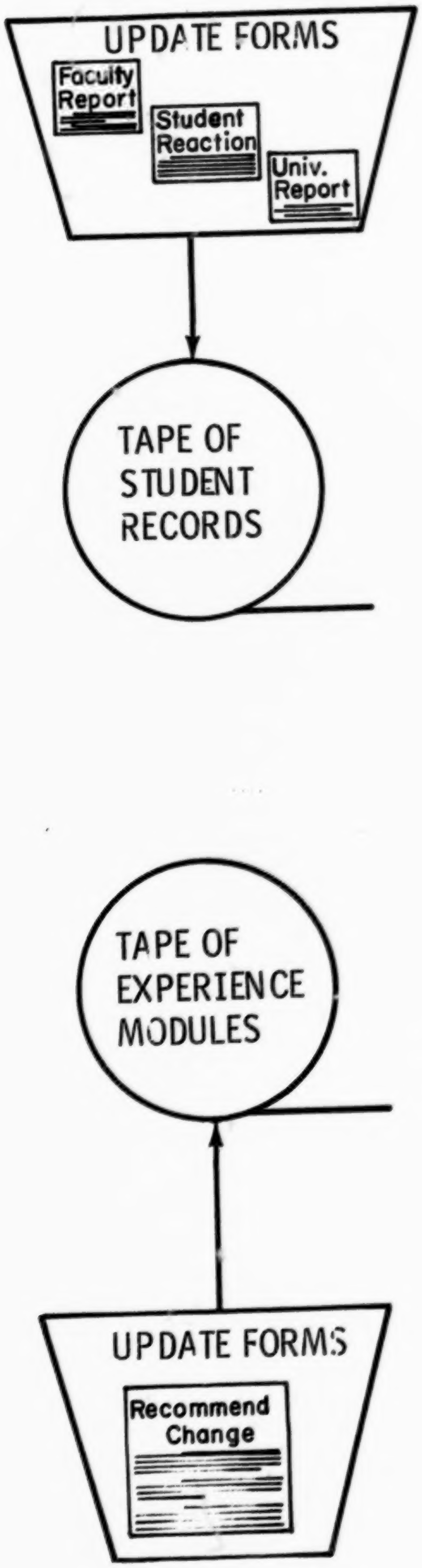


FIG. X-5

Relationship of Faculty to Files of Experience Modules and Student Records

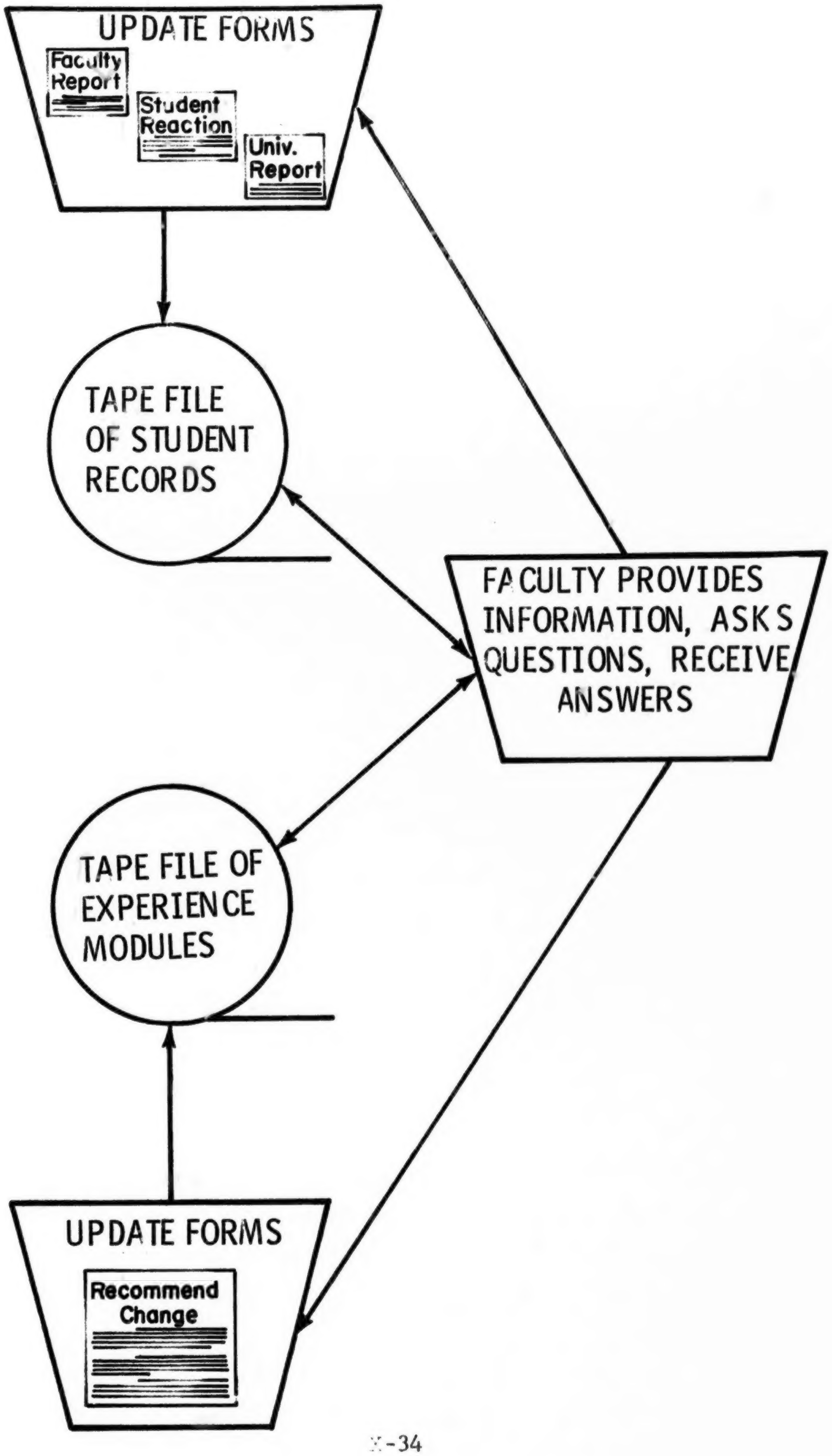
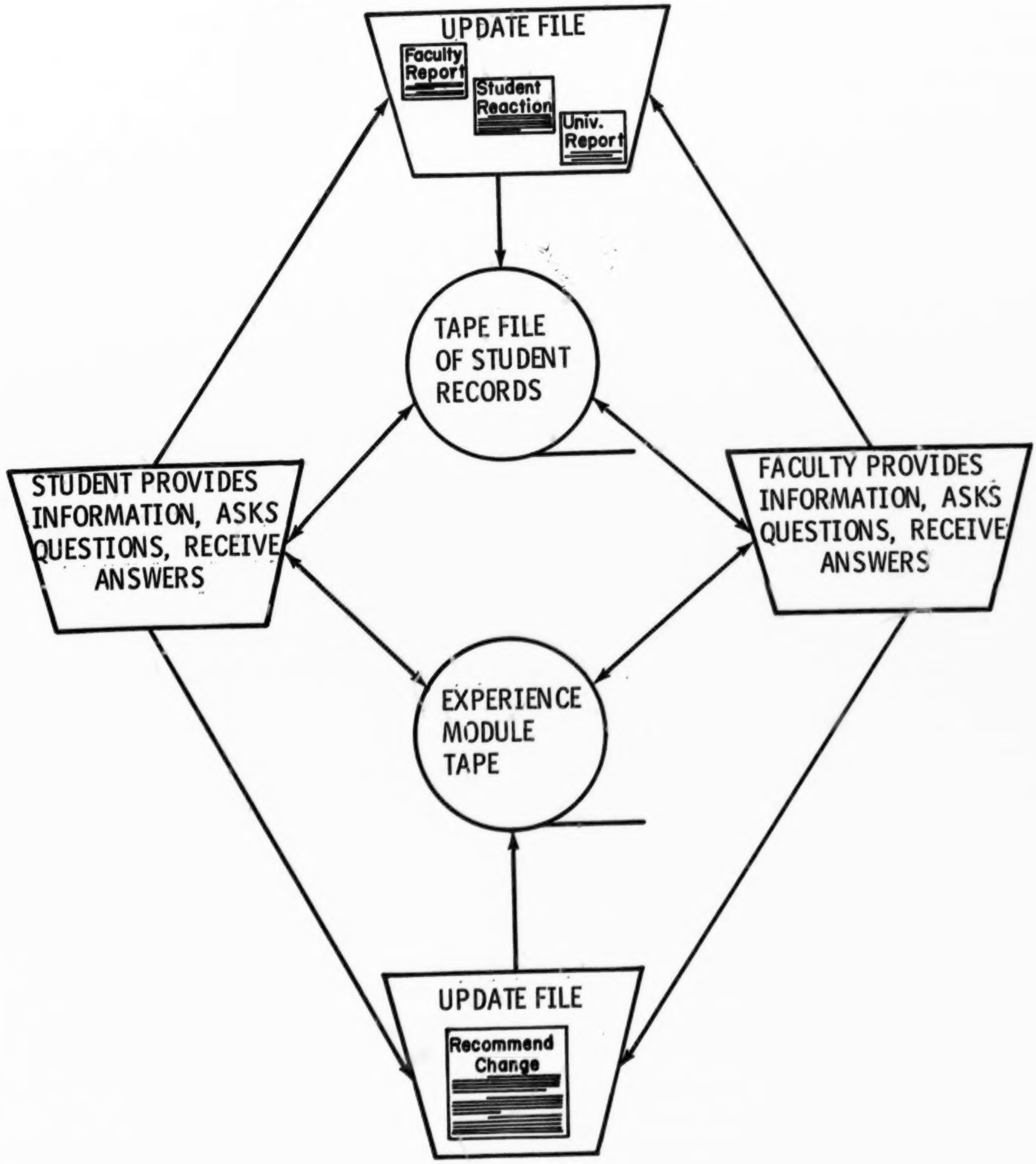

UPDATE FORMS
Faculty Report
Student Reaction
Univ. Report
TAPE FILE OF STUDENT RECORDS
FACULTY PROVIDES INFORMATION, ASKS QUESTIONS, RECEIVE ANSWERS
TAPE FILE OF EXPERIENCE MODULES
UPDATE FORMS
Recommend Change

FIG. X-6

Relationship of Students and Faculty to Files of Student Records and Experience Modules.


UPDATE FILE
Faculty Report
Student Reaction
Univ. Report
TAPE FILE OF STUDENT RECORDS
STUDENT PROVIDES INFORMATION, ASKS QUESTIONS, RECEIVE ANSWERS
FACULTY PROVIDES INFORMATION, ASKS QUESTIONS, RECEIVE ANSWERS
EXPERIENCE MODULE TAPE
UPDATE FILE
Recommend Change

system of information which will eventually evolve in most universities in the nation.

An important consideration in establishing this information system will be to maintain adequate security to protect the privacy of individual students. Such provisions have been established by businesses in order to safeguard information about personnel and products. Similar security measures will be essential in university information systems.

GENERATING PROGRESS CHARTS FOR STUDENTS

Table X-14 illustrates some of the raw data used in compiling a transcript for the hypothetical student, William Johnson, during the period from Fall, 1966, through the Spring, 1967. The specific sets of modules which William Johnson took are listed for each quarter and the letter grade which he received for each of those sets is listed. It is important to note that instead of a letter grade, some other evaluative rating or remarks might be used, e.g., acceptable, not completed, unacceptable.

Figure X-7 is related to the previous exhibit in that it shows the pattern of grades which William Johnson received during the two school years cited. The vertical axis lists the letter grades, "A, B, C, D, E," and it also includes ratings for "incomplete" or "withdrawal" from a set of modules. The horizontal axis indicates the quarters in the school year and the corresponding modules.

Following the practice of industrial engineers, the illustration indicates an upper control limit for the pattern of William Johnson's grades and a lower control limit for those grades. These limits could be altered or modified as the faculty might choose. However, it is important to recognize that the upper control limits in Figure X-7 reflect the value judgement that a student who achieves grades of "A" in one or more subjects should be recognized as talented in that particular area, and the university has an obligation to make some provision to enable that student to extend his competencies wherever possible. The

TABLE X-14

HYPOTHETICAL TRANSCRIPT OF SETS OF MODULES USED TO PLOT CONTROL CHART FOR INDIVIDUAL STUDENTS

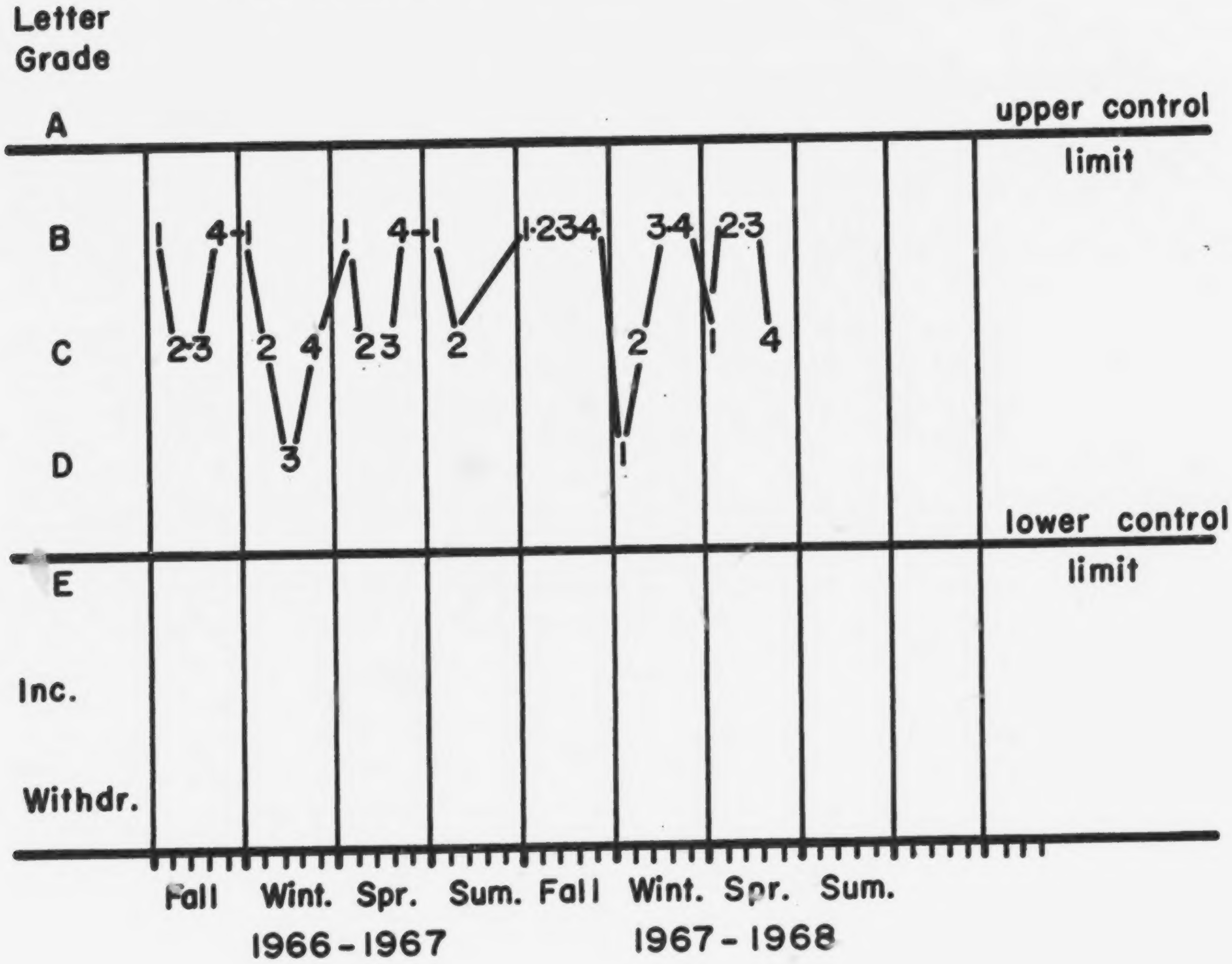
Student Johnson, William
ID 322145
Period Requested Fall, 1966-Spring, 1967

Quarter	Line	Component Modules	Grade
Fall, 1966:	1.	Humanities Modules	1-10......B
	2.	Natural Science Modules	1-12......C
	3.	Humanities Modules	11-25.....C
	4.	Human Learning Modules	1-62......B
	5.		
Winter, 1966:	1.	Humanities Modules	26-37.....B
	2.	Natural Science Modules	12-21.....C
	3.	Natural Science Modules	22-33.....D
	4.	Social Science Modules	1-10......C
Spring, 1967:	1.	Humanities Modules	38-47.....B
	2.	Social Science Modules	11-20.....C
	3.	Natural Science Modules	34-42.....C
	4.	Humanities Modules	48-55.....B
	5.		
Summer, 1967:	1.	Humanities Modules	56-67.....B
	2.	Social Science Modules	21-32.....C
	3.		
	4.		
	5.		
Fall, 1967:	1.	Humanities Modules	68-73.....B
	2.	Social Science Modules	33-45.....B
	3.	Natural Science Modules	43-53.....B
	4.	Humanities Modules	74-81.....B
	5.		
Winter, 1967:	1.	Natural Science Modules	54-65.....D
	2.	Social Science Modules	46-57.....C
	3.	Humanities Modules	82-89.....B
	4.	Humanities Modules	90-96.....B
	5.		
Spring, 1967:	1.	Social Science Modules	57-66.....C
	2.	Humanities Modules	97-107....B
	3.	Humanities Modules	108-114....B
	4.	Social Science Modules	67-79.....C
	5.		

FIG. X-7

Control Chart Indicating sets of Modules Completed

by Johnson, William



lower control limits reflect the value judgement that if a student drops below an arbitrarily defined lower control limit, then the university has an obligation to identify that student as soon as possible and to take those steps which will enable the student to participate successfully in the university program. Since the grades and the modules are well defined variables, such a control pattern for individuals or groups of individuals could operate automatically and the system could signal breaches in one or more of the control limits.

Table X-15 indicates a listing of data used to plot a control chart for William Johnson on a hypothetical teaching criterion #7. In order to understand this variation of the progress chart, assume that William Johnson has been observed working with a group of youngsters and criterion #7 on the observation schedule relates to the incidence of misbehavior which has occurred in his class during the observation period. An instance of misbehavior is arbitrarily defined as an occasion when the student trainee must divert his attention from guiding instruction of the group to correct the behavior of one or more pupils in the class. As shown in Table X-15 the reporting period is for a two-week observation period and each observation period is 60 minutes duration.

The control chart listed in Figure X-8 provides a vertical axis to indicate the number of misbehaviors and the horizontal axis refers to the observation period on each of the five days of the week for a two-week period. The figure shows an upper control limit, but no lower control limit is specifield, It is apparent that the incidence of misbehavior for students under the direction of William Johnson did not extend beyond the upper control limit, although there were variations which might be expected to occur for any trainee or practicing teacher.

It is important to note that this kind of information could be collected by the sponsoring teacher or by the university supervisor or by other trainees in a micro-teaching situation. This information on criterion #7 is purely fictional. However, similar types of data on other kinds of events which occur when trainees meet with pupils could be collected and fed into a student record system to enable the system to identify those pre-interns

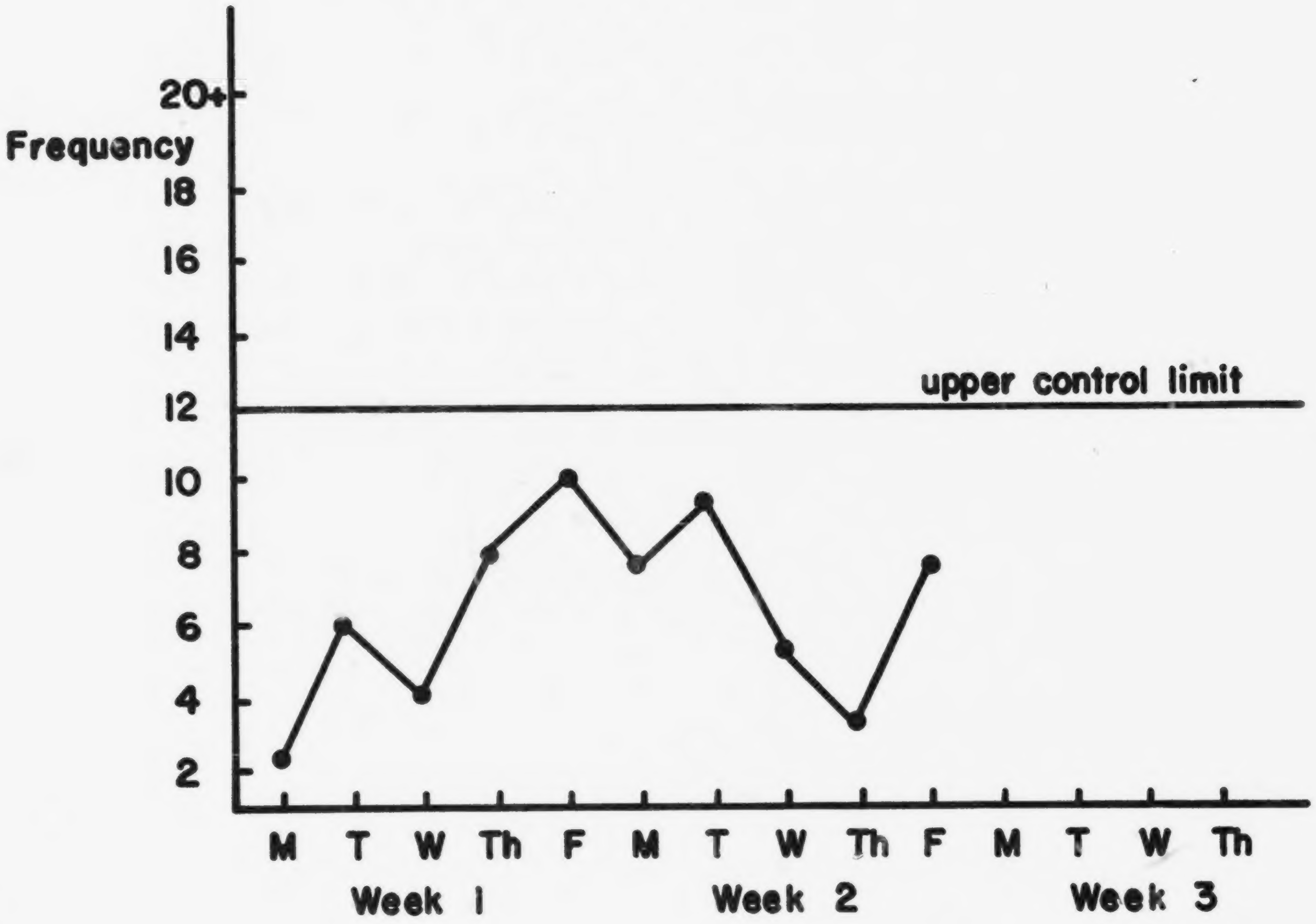
TABLE X-15

DATA USED TO PLOT CONTROL CHART FOR STUDENT TEACHING CRITERION #7

*Observation Schedule			
*Student	Johnson, William		
*ID Number	322145		
*Criterion	7 (Misbehaviors observed)		
*Time Period	60 minutes per observation		
	Week #1	Mon	2 Misbehaviors
		Tues	5 Misbehaviors
		Wed	4 Misbehaviors
		Thurs	8 Misbehaviors
		Fri	10 Misbehaviors
	Week #2	Mon	7 Misbehaviors
		Tues	9 Misbehaviors
		Wed	5 Misbehaviors
		Thurs	4 Misbehaviors
		Fri	7 Misbehaviors
*Date	May, 1967		
*Observer	Harrison, William		

FIG. X-8

Control Chart for Student Intern Criterion 7



working in classes where misbehavior occurs very often and beyond the acceptable limits. It could also be used to identify those trainees who are providing very creative activities in their respective classrooms. This kind of information would appear in students' profiles if the university faculty and teachers working with students take steps to identify these activities and record them for transmission to the student record tape file.

COMPONENT PROFILE OF STUDENT'S PROGRESS

Figure X-9 provides a profile of the progress of William Johnson through the experience modules in science and in clinical teaching. Inspection of Figure X-9 shows that the "*COMPONENTS" are listed on the left side of the figure and the module numbers are listed above and below the various components. At the right of the figure is a rating scale to indicate the evaluations by instructors who worked with William Johnson as he completed the various modules.

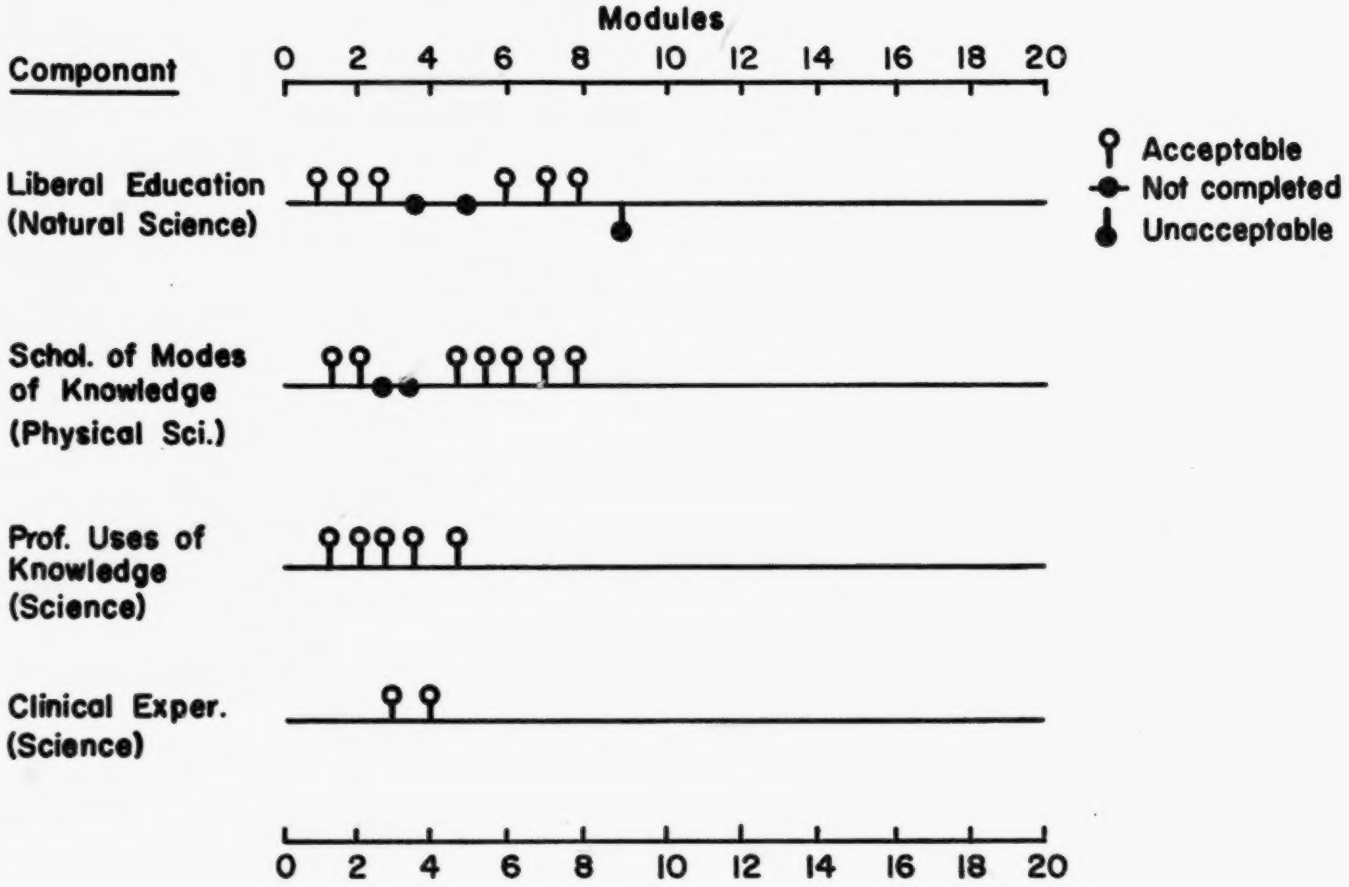
One advantage of this profile format is that it provides an overview of the progress of the student in the perspective of modules completed in several components. Although only four components are listed in Figure X-9 the computer could provide similar progress charts for all of the modules in all components which the student has undertaken.

The information presented in this figure supports the impression that William Johnson has been working at an acceptable level, except for a single occasion (module #9 in General Liberal Education-Natural Science) when his work was rated as "unacceptable."

The profile in Figure X-9 also indicates that there have been few opportunities for the student to practice teaching science in a field setting. Only two occasions are reported. This type of information might be helpful to the university faculty and cooperating teachers in the schools who are working with the student. It suggests that they should deliberately provide more opportunities for this student to participate in teaching science in the school setting.

FIG. X-9

Profile of Student's Progress Through Experience Modules



Name of Student *Johnson, William*   ID *322145*

Date *October 29, 1968*

Some gaps appear in the sequence of experience modules which the student has completed. Modules 4, 5 in General Liberal-Education Natural Science and Modules 3, 4 in Scholarly Modes of Knowledge - Science have not been completed. This observation simply raises questions about the continuity of these experiences or the possibility that they have been waived for this student.

Finally, one might easily question whether or not the student has progressed sufficiently in completing this number of modules by the date of the report, October 29, 1968. It is not the intent of the project to impose an arbitrary time schedule upon students to complete certain sets of modules. On the other hand, no service is rendered to a student when he is permitted to languish indefinitely in some set of experiences without inquiring about his particular time schedule for himself.

EXTENSIONS OF INFORMATION SYSTEM

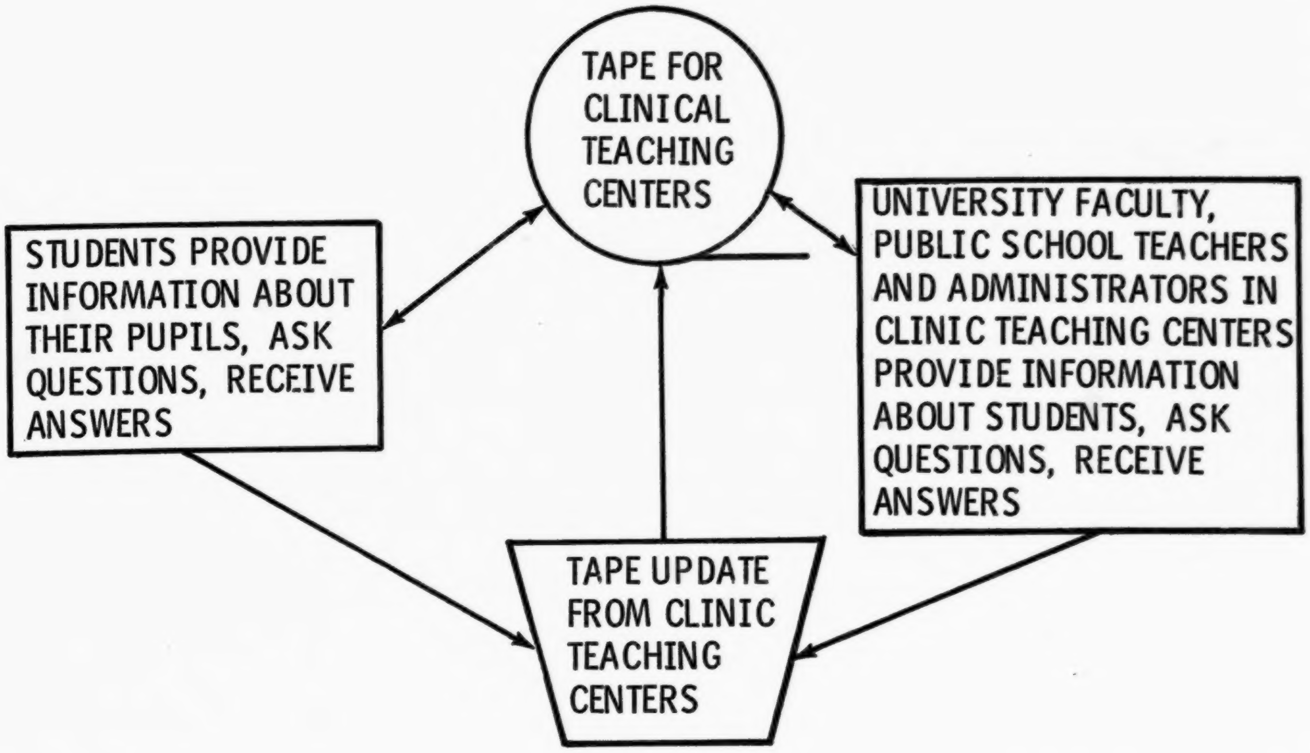
CLINIC TEACHING CENTER - DATA FILE TAPE

It is assumed that clinic teaching centers would serve as field centers for the on-site induction of prospective elementary school teachers into their major tasks, roles, and responsibilities. It is assumed that the responsibility for guiding this induction is shared equally by university and elementary school faculty.

Figure X-10 illustrates some of the ways in which the computing services might be utilized by clinic teaching centers. As shown in that illustration, these centers would have their own tape or disk file of pertinent information about pupils, students, and the school-community. Students would provide information, ask the system questions, and receive answers from the computer system via teleprocessing. Elementary school teachers, administrators, and university faculty in the clinic school centers would be able to provide information, ask questions, and get answers from the system. Each of these three distinct sets of professional educators would participate in updating the tape file with information about the schools participating in the clinic teaching center.

FIG. X-10

RELATIONSHIP OF CLINIC TEACHING CENTERS TO UNIVERSITY INFORMATION SYSTEM


TAPE FOR CLINICAL TEACHING CENTERS
STUDENTS PROVIDE INFORMATION ABOUT THEIR PUPILS, ASK QUESTIONS, RECEIVE ANSWERS
UNIVERSITY FACULTY, PUBLIC SCHOOL TEACHERS AND ADMINISTRATORS IN CLINIC TEACHING CENTERS PROVIDE INFORMATION ABOUT STUDENTS, ASK QUESTIONS, RECEIVE ANSWERS
TAPE UPDATE FROM CLINIC TEACHING CENTERS

One might reasonably ask what kinds of information might be loaded onto the magnetic tape for the clinic teaching center. Teacher interns might prepare diagnostic tests and administer them to pupils in their classes. They could build a file about pupils in order to identify persistent behavior patterns of those pupils and maintain this file on magnetic tape from one quarter to the next. These diagnostic data could be scored, analyzed, and appropriate profiles could be provided by the computer to the student. Observations of pupils' remarks, programmed instructional materials, and similar instructional materials could be recorded, indexed and made available to the trainees or intern teachers for use with their particular classes.

The clinic teacher could describe the school or the community and have this information loaded onto magnetic tapes for later inspection by other teachers or other students who participate in the clinic teaching center.

The pre-intern teacher could have an impressive array of experiences in simply arranging to collect information about pupils and to organize this data into a form to be transmitted to the university computing center and returned via telephone lines, CRT terminal, or some other high speed transmission devices. The students and teachers who would participate in such information storage and retrieval tasks would need to upgrade their skills in interpreting, coordinating, and arriving at decisions about the quality of their students' work. It appears that elementary school teachers would assume more of a managerial responsibility in guiding pupils' instructional program. This would indicate that students and teachers alike would require help in understanding the processes involved in their decisions. This opens an opportunity for teachers to employ mathematical models which regretably have not been major influences in the decision-making apparatus of school personnel.

It is apparent that it would be expensive to implement such a sophisticated information system for the participating schools. It seems reasonable to expect that the state departments of education and the local schools' data processing systems could share with the university some of the computing expenses and loads which are involved in the educational programs of pupils and university students. The university might undertake those important information processing tasks which it has the hardware and the software to accomplish, and which the state department or the local data processing equipment would be unable to provide.

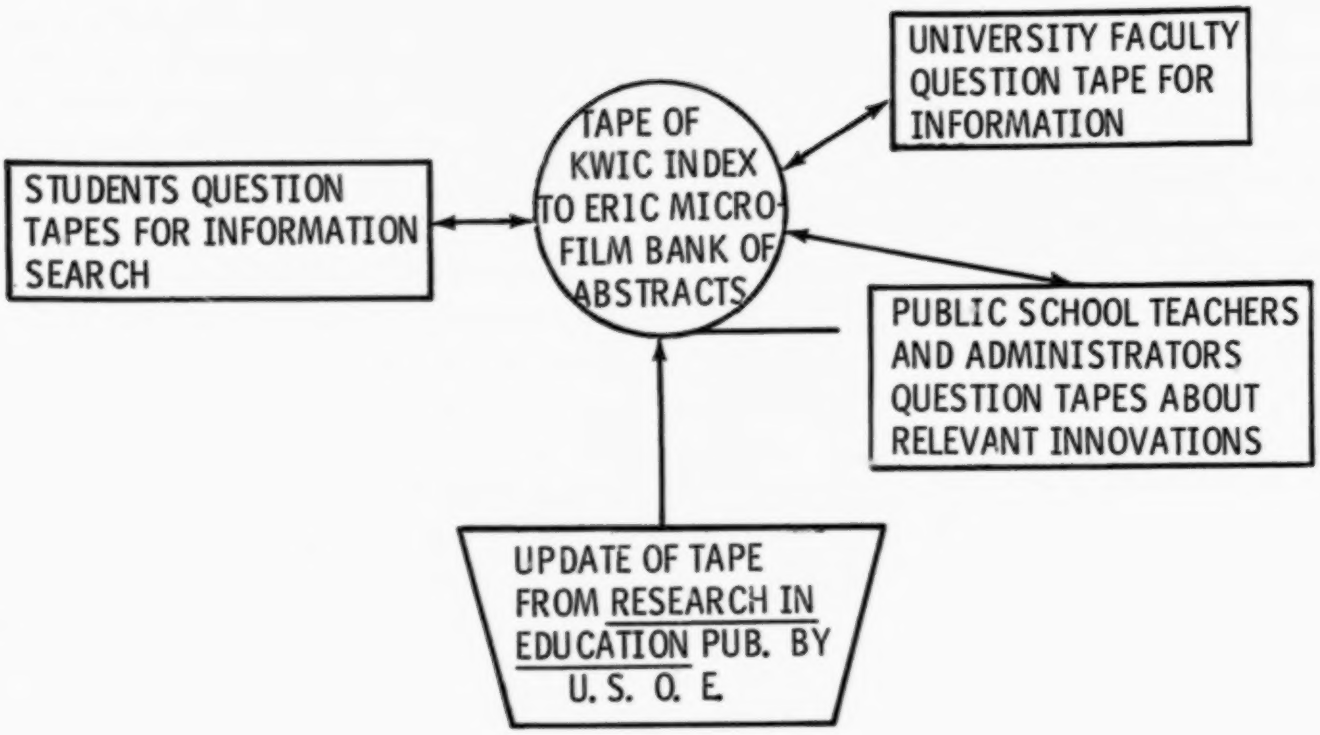
It seems reasonable to expect that the increase in volume of requests and uses of the data processing equipment would lead to a reduced cost per unit of use. Moreover, the full use of the equipment (three 8-hour shifts) would also provide a compelling argument for the university to make an effort to secure large computing facilities to handle these requests for services for the teacher education program.

ACCESS TO ERIC AND SIMILAR DEPOSITORIES

Figure X-11 indicates one way in which the information centers existing in the nation might be used to influence or alter the experience modules defined by the Behavioral Science Elementary Teacher Education Program. The documents in the ERIC system and its subsidiary information units are regularly reported in the journal, Research in Education. KWIC (Keyword in Context) or KWOC (Keyword Out of Context) indexes to this journal could be prepared by the BIRS programs and this magnetic tape or computer listing of the index could be available to students, university faculty, and public school teachers or administrators. For students and faculty who are near the computing center at the university, they could directly question the ERIC Index and identify reports of research which appear to be innovations in the education of elementary school teachers. Teleprocessing could also be used so that school teachers and administrators participating with the clinic school centers would have access to terminals in order to search the information banks such as ERIC and its subsidiaries.

FIG. X-11

RELATIONSHIP OF CLINIC TEACHING CENTERS TO UNIVERSITY KWIC INDEX TO INNOVATION IN ELEMENTARY EDUCATION


UNIVERSITY FACULTY QUESTION TAPE FOR INFORMATION
TAPE OF KWIC INDEX TO ERIC MICROFILM BANK OF ABSTRACTS
STUDENTS QUESTION TAPES FOR INFORMATION SEARCH
PUBLIC SCHOOL TEACHERS AND ADMINISTRATORS QUESTION TAPES ABOUT RELEVANT INNOVATIONS
UPDATE OF TAPE FROM RESEARCH IN EDUCATION PUB. BY U. S. O. E.

HARDWARE AND SOFTWARE NEEDED TO IMPLEMENT MAIN IDEAS IN PROGRAM

Figure X-12 illustrates some of the main components in a sophisticated information processing system which would be capable of implementing the ideas proposed in this model program. The central processor is the main component in the information system and it would be a unit such as the IBM 360, mod 65 or the CDC 6500. Table X-16 provides rough estimates of the expenses to lease the central processor and other peripheral equipment.

Input/output devices which would accompany such a system would include a variety of terminals, e.g. cathode ray tubes (CRT) as well as IBM 1050 and Teletype Model 33 or 35 ASR terminals. These units would be capable of sending and receiving alphameric data at varying rates of speed. The central processor could also be supplied with optical scanning units such as the IBM 1230 or the Digitek Optical Scanner. It may have optical readers similar to IBM 1428 which can scan documents which have alphameric characters and transform those characters to cards, tape, or disk storage for computer processing.

As indicated in Figure X-12, output from the central processor could go directly to the terminal devices. On the other hand, it would be important for the central processor to have one or more high speed printers accessible to it. Printers of this caliber should be capable of delivering at least 30,000 lines per minute. Another aspect of the peripheral equipment which accompanies a sophisticated central processor would be the availability of microfilmers, readers, and reader-printers. These microfilm units would be capable of recording images from the computer printout, and they should also have the capability of microfilming output from the cathode ray tubes.

Figure X-13 illustrates some of the typical media used to store data received from the central processor. This would include IBM cards, paper or magnetic tapes various types of microforms, and random access disk storage units.

FIG. X-12

INPUT/OUTPUT MEDIA

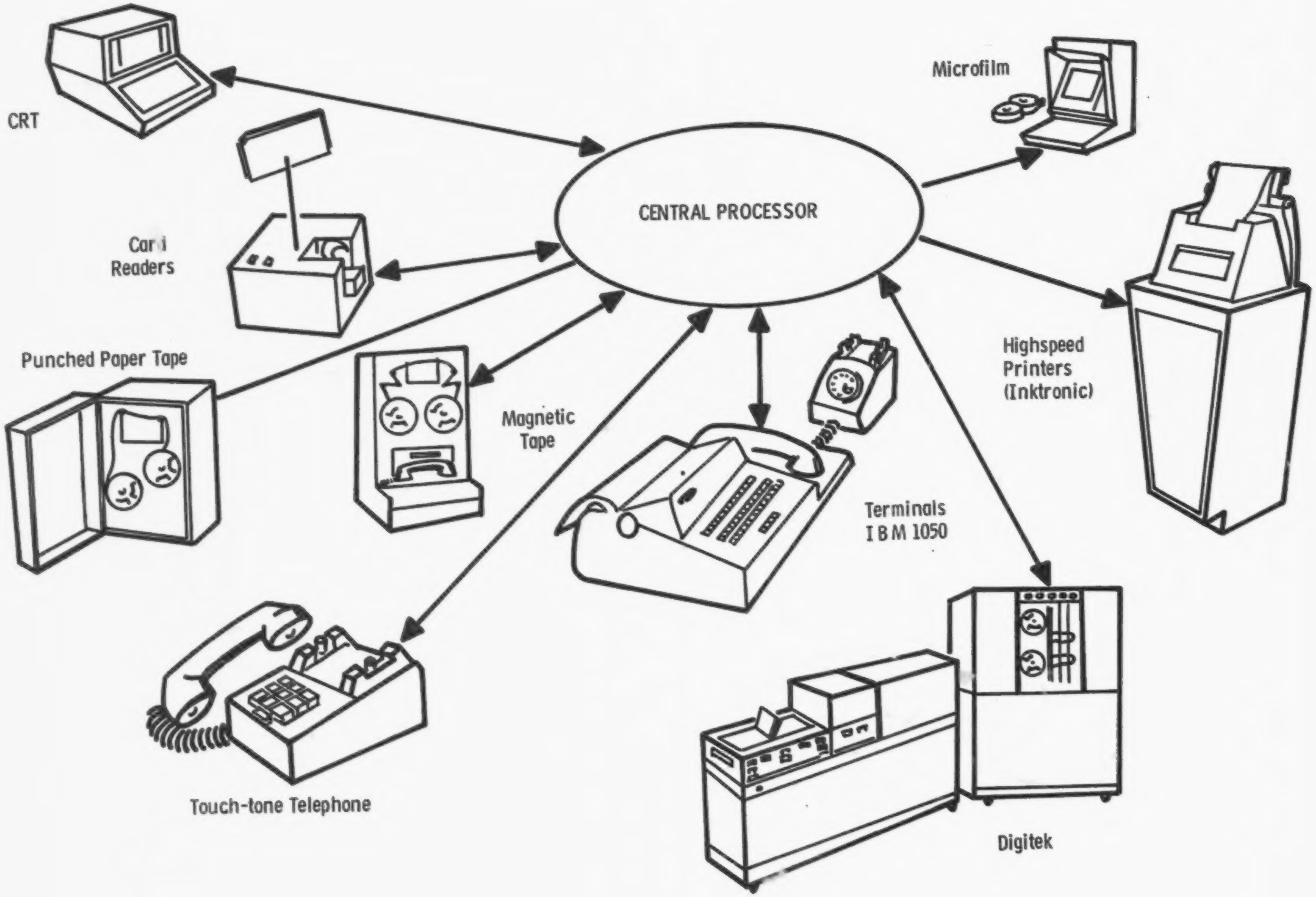


TABLE X-16

REPRESENTATIVE HARDWARE AND COST ESTIMATES LEASE*

Item	Input-Output Category	Manufacturer	Approximate Monthly Rental
1	Cathode Ray Tube	RCA Spectra 70/752 Raytheon DIDS-400	$ 190 160
2.	Card Read Unit	Uptime Corp. Speed-reader 400 Tally Dartex IBM	 $ 95 $ 150
3.	Paper Tape	Tally 700 wpm Transmitter, Receiver Friden	$ 140 $ 90
4.	Magnetic Tape	Mohawk	$ 150
5.	Touch-Tone Telephone	Bell Telephone	$ 30
6.	Keyboard Terminals	IBM 1050 TT 33 ASR	$ 125 to $ 300 $ 750 purchase
7.	Optical Scanner & Optical Readers	IBM 1230 (scanner) Digitek (scanner) IBM 1428 (reader) Recognition Equip. Co. (reader)	$ 500 $ 700 $ 3000 $ 15,000
8.	Microfilmer-Computer Interface	Stromberg-Carlson	$ 11,000

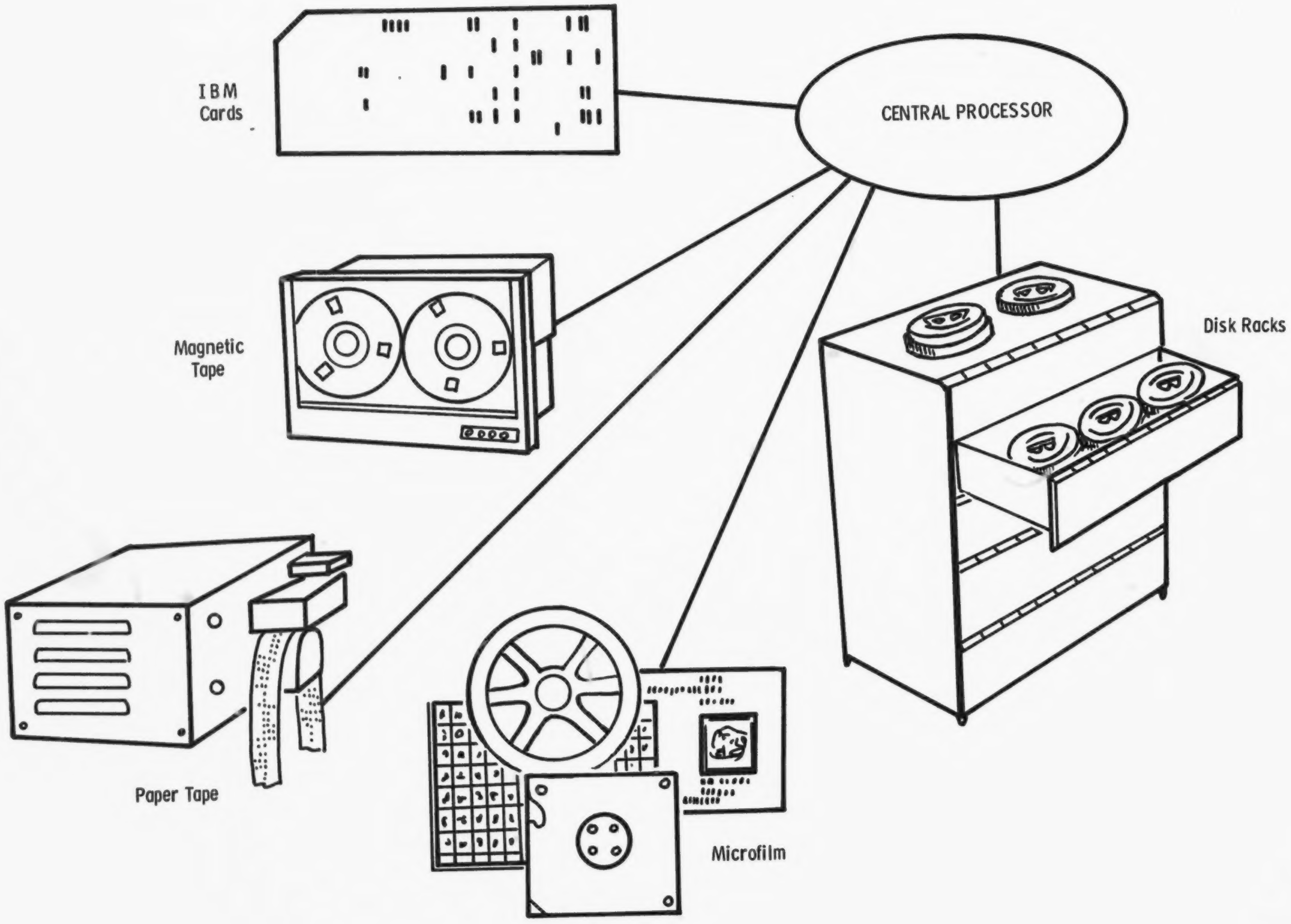
TABLE X-16 CONT.

9.	Microfilmer	Kodak Model 400	$2200	purchase
		Bell & Howell Microrecorder	$2800	purchase
	Microfilm Reader	Kodak Starmatic (Roll Film)	$ 600	purchase
		Dietzgen Co. Model 4308 (Roll)	$ 300	purchase
	Microfilm Reader-Printer	Kodak Magnaprint (Roll, Jackets)	$1350	purchase
		3M Company Model 400 (Roll, Jackets)	$1100	purchase
10.	Central Processor	IBM 360/Mod 65	$56,000	
		CDC 6500	$52,000	

* Sources: "Annual Reference Section", Business Automation, September, 1968. pp. 65-185 and manufacturers' brochures.

FIG. X-13

STORAGE MEDIA



Some of the data processing capabilities of a large central processor are shown in Figure X-14. It would be capable of responding to the information processing requirements of students and faculty on campus as well as the administrative chores of the university management. This service could be in the form of teleprocessing or batch processing, depending upon the task and needs of the user. Through teleprocessing, the university computing center would be able to establish and maintain reciprocal arrangements with local, state; and national computing centers which have concentrated upon collection, analysis, and dissemination of information about educational problems.

As indicated in Figure X-14, a central processor would be capable of teleprocessing information with remotely located clinic teaching centers. For example, the university could establish clinic teaching centers with cooperating schools in any one of several counties or districts throughout a given state. By means of telephone lines, it would be possible for the university computing center to utilize one or more of the input/output devices indicated in Figure X-12 to provide computing services for the cooperating schools affiliated with the clinic teaching centers.

Some of the typical packages of software available in the libraries of large central processors are indicated in Figure X-15. For example, it would be possible to process alphameric data delivered in natural language (teleprocessing or batch processing) by means of software packages such as BIRS or SMART. The university's central processor should be able to provide diagnostic profiles of academic achievement of students at the university as well as similar profiles of achievement of selected pupils in classes or trainee and intern teachers. A sophisticated information processing system would be essential to create an automated student record system which would deliver the kinds of control charts discussed previously.

Computer augmented simulation studies at the university and in the clinic teaching centers could be undertaken with the GPSS (General Purpose Simulation System) of IBM or with SIMSCRIPT. Figure X-15 suggests several other typical software packages for planning, statistical analyses of data, problem solving with

FIG. X-14

TELE PROCESSING/BATCH PROCESSING

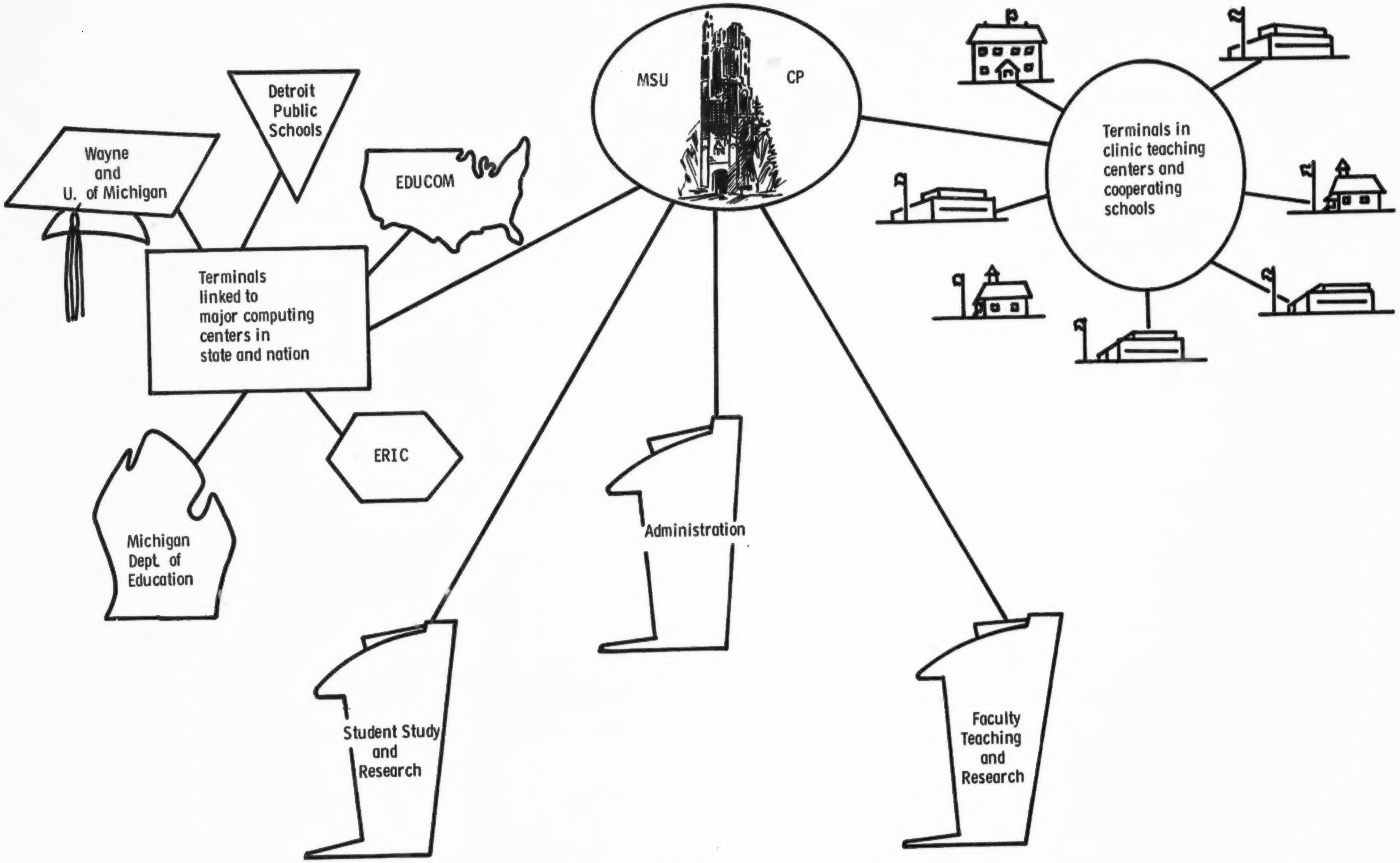
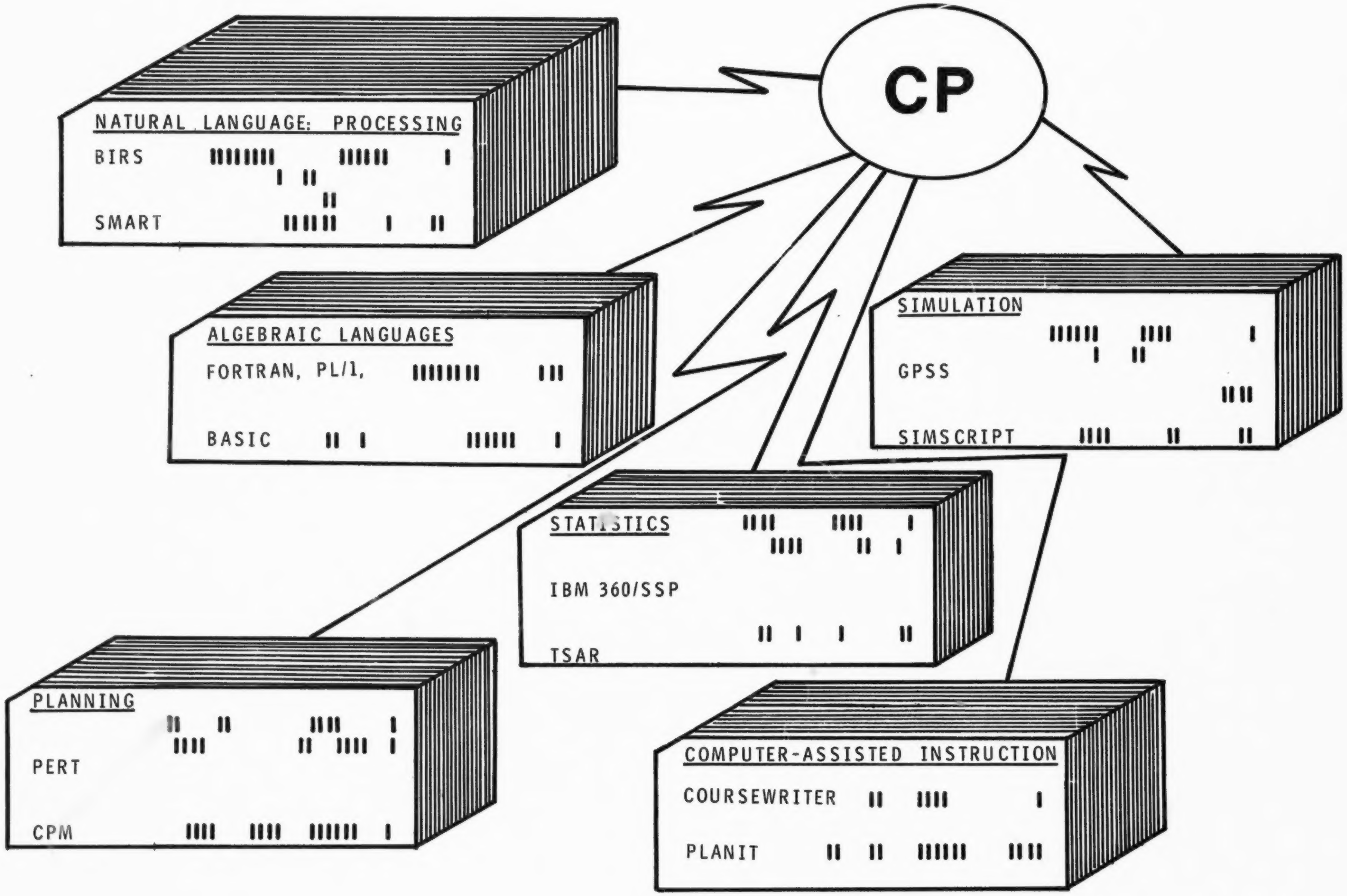

MSU
CP
Terminals in clinic teaching centers and cooperating schools
Wayne and U. of Michigan
Detroit Public Schools
EDUCOM
Terminals linked to major computing centers in state and nation
ERIC
Michigan Dept. of Education
Administration
Student Study and Research
Faculty Teaching and Research

FIG. X-15

REPRESENTATIVE SOFTWARE IN LIBRARY OF CENTRAL PROCESSOR



elementary algebraic languages, and languages appropriate for computer assisted instructional programs. It is important to realize that these software packages simply provide powerful tools to be used in solving educational problems. The software packages are not solutions to those problems, but they may be formidable instruments to solving problems when they are used selectively and in a knowledgable manner.

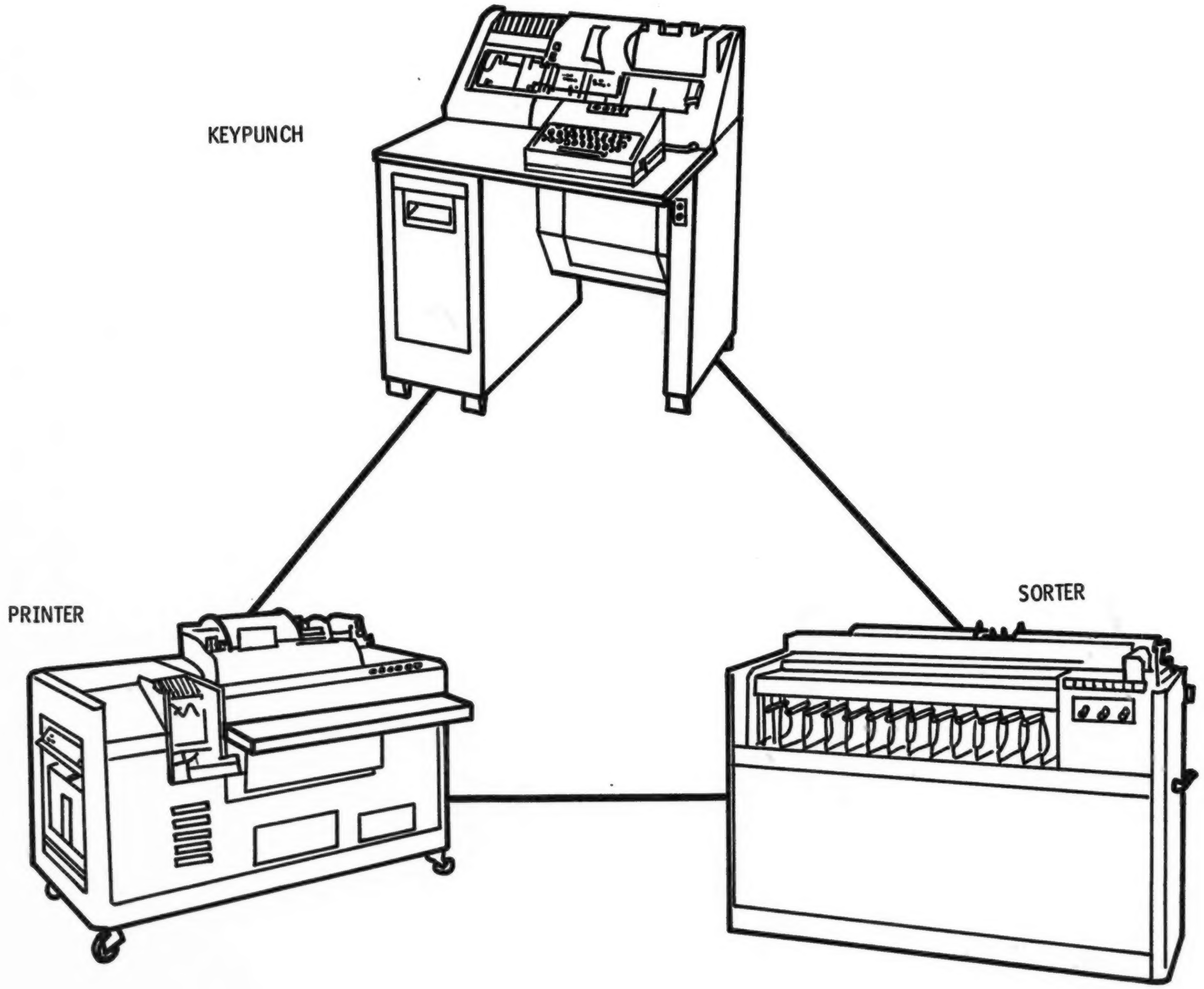
A very sophisticated and expensive central processor similar to the one suggested in Figure X-14 would have a finite limit to its information processing capabilities. In other words, the tasks which would draw upon this information processing power (the software packages just mentioned) would have to be assigned some priority, because it would be impossible to do all of these things for all of the students and faculty in the university and for all of the schools and pupils in the cooperating clinic teaching centers. It is impossible to do all of the information processing tasks that one might undertake and it is confusing to collect all of the possible information that one might collect about any student. One cannot avoid the obligation to assign certain priorities to these tasks and to make some judgement in the selection of information or software packages that will be utilized in the information retrieval system.

OPERATING THE EXPERIENCE MODULE PROGRAM ON A SHOESTRING

Figure X-16 shows a primitive and relatively inexpensive form of a central processor which might be used with the experience modules described in this project. Specifically it shows three major elements, i. e., keypunch, sorter, printer. This triad is probably the least expensive means of conducting mechanical processing of information in the experience modules. It should be obvious that such a primitive form of data processing equipment would not be able to handle many of the complicated tasks that were alluded to in the previous sections, but the possibility still exists for processing some of this information when one has access to only these three pieces of data processing equipment.

FIG. X-16

Three pieces of equipment may be used to create a Primitive Central Processor to analyze the Data Bank of Experience Modules.



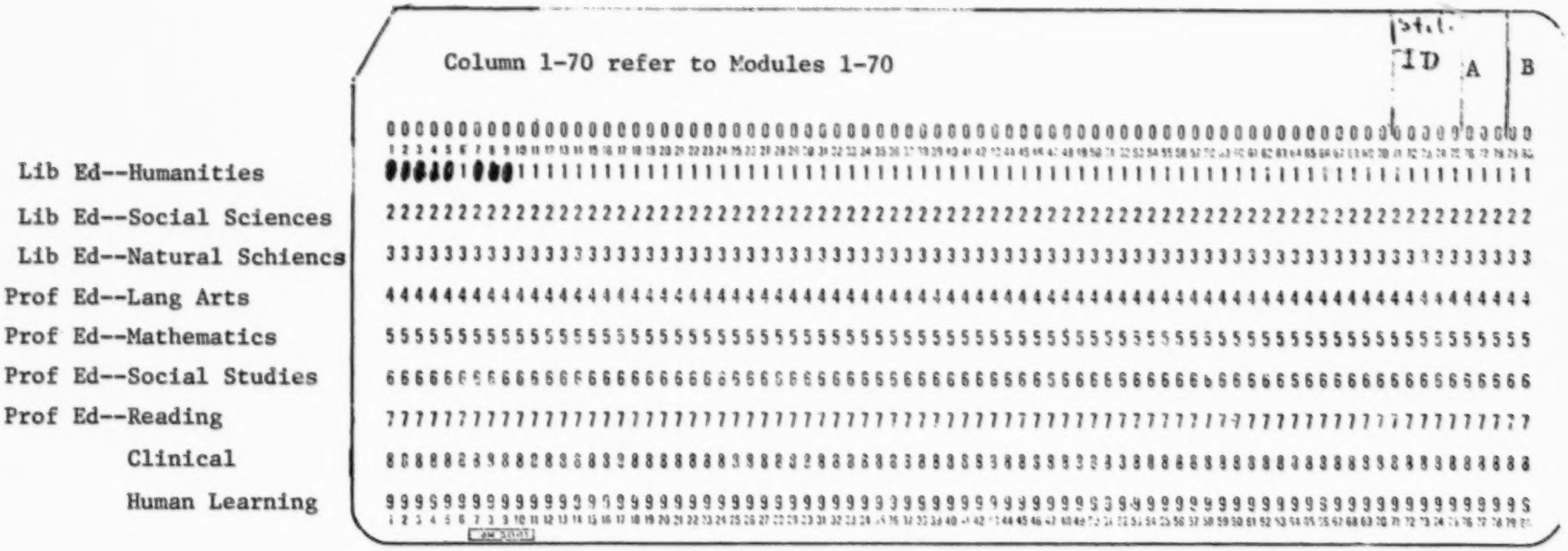
For example, the keypunch would be used to punch new information and/or evaluations of students as the students complete the modules and as they are evaluated by the faculty in the teacher education program. The sorter could be used to identify students who have completed a specific module or failed to complete a particular module or have completed the module with an unsatisfactory rating of one form or another. It would also be possible to use the sorter to undertake logical or mechanical sorting within categories of the components. The printer could be used to list one or more copies of the modules and could be used to list student records which might be required by faculty or students. The printer would also provide tables of students who have completed one or more of the modules in some sequence.

The key to using this inexpensive and crude form of information retrieval would be the format for the IBM cards which would be used. The format for such a card can be organized in several ways. Figure X-17 illustrates one possible way, but certainly this is not the only way or even the best way of organizing such a unit record system. Figure X-17 shows that this card is concerned with modules 1-70 and columns 1-70 on the IBM card are used to apply to those particular modules. As arranged in the figure the first row of ones on the card refers to all of the experiences in the General Liberal Education-Humanities component; row two refers to the General Liberal Education-Social Sciences component; row three refers to the General Liberal Education-Natural Sciences component; row four refers to the Professional Education Language Arts component; row five refers to the Professional Education -Mathematics component; six refers to the Professional Education-Social Studies component; row seven refers to the Professional Education-Reading component; row eight refers to the Clinical experiences component; and row nine refers to the Human Learning component. It is obvious that this list of components could have been reorganized or classified in a different way if one chose to do so.

Figure X-17 indicates that columns 71-75 are reserved for the student identification number. Columns 76-78 are indicated by Letter "A" and are reserved for ratings or other information that the faculty may care to designate. Columns 79-80 are indicated by letter "B" and are reserved to indicate the number of the card.

FIGURE X-17

POSSIBLE CARD FORMAT TO USE WITH STUDENT RECORDS



Punch in column indicates student has completed module. Only 1 punch in a column.

With two columns, it is possible to have as many as 99 cards for any given individual. If each card refers to 70 separate modules, this would mean that the 99 cards could record a student's success or failure on more than 6900 separate modules.

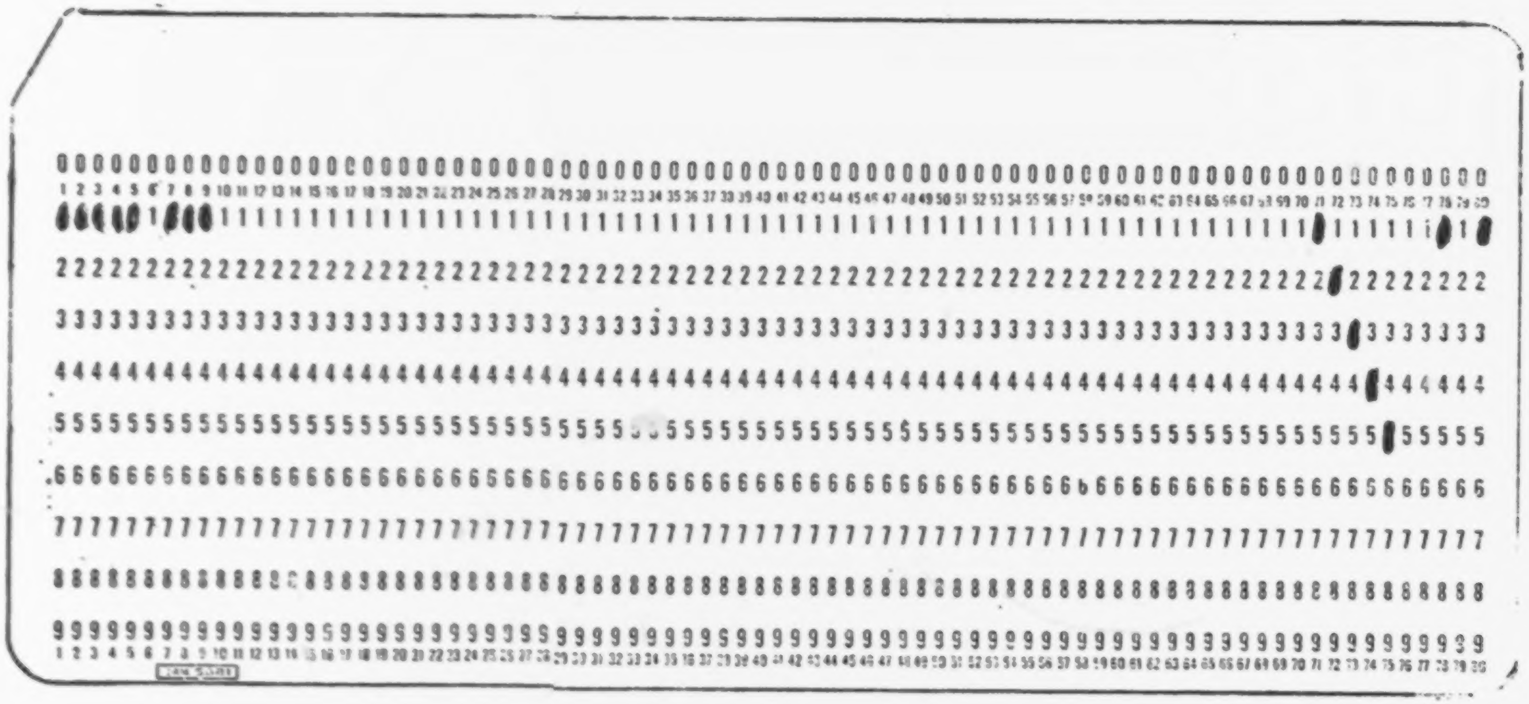
An example of the way in which the cards might be used is shown in Figure X-18. The marks indicate that this card applies to the General Liberal Education-Humanities component. This is apparent because all of the punches are in row one. As indicated by the punch marks, the student has completed modules 1,2,3,4, and 5, as indicated by punches in columns one through five. With no punch in column six, this might indicate that the student had not completed the minumum requirements for module six. Punches in columns seven, eight, and nine would indicate that the student had successfully completed those modules. Since there are no punches in any of the other ones in the humanities row, this would indicate that the student has not progressed beyond module nine.

In columns 71-75 the student identification number is given as 12345. Columns 76-80 indicate that the student has a rating of 1 for the modules. Columns 79-80 indicate that this is the first card of the set for this particular student.

Once again, it is important to note that the preceding remarks have applied to a hypothetical unit record card and there are many other possible variations of this way of classifying modules and utilizing the IBM card or other unit records to keep track of students' progress through the sequence of modules. This is certainly not intended to suggest that there is only one way of doing this task. It is intended to offer a suggestion as to how it might be done inexpensively and simply by using only a keypunch, sorter, and printer.

FIGURE X-18

SAMPLE CARD FOR STUDENT WITH ID NUMBER 12345



*Student ID No. 12345 has completed Humanities modules 1 through 5, omitted module 6, completed modules 7 through 9.

IRREGULAR SYMBOLS

Curriculum writers kept a large number of modules until near the end of the project to revise and refine their contributions. This resulted in an excessively large keypunching task in the last few weeks, and an unforeseen problem. Several sources were employed to keypunch modules, and the machines of one major operator coded symbols differently from that used in other parts of the program. Translation by the MSU computer of these data cards resulted in several odd symbols, which were not noted until after some of the report had gone to the printer. While this can be corrected in subsequent printings, the odd symbols remain as interpreted in this report.

As printed		Meaning
≥	=	(
↑	=	)
≤	=	'
[	=	"

BIBLIOGRAPHY

"Annual Reference Section;" Business Automation; Vol. 15, No. 9, Sept., 1968; pp. 65-185.

Becker, Joseph and Hayes, R. M.; Information Storage and Retrieval; John Wiley & Sons, New York, 1963.

Bourne, Charles P.; Methods of Information Handling; John Wiley & Sons, New York; 1963.

Cuadra, Carlos A.; Annual Review of Information Science and Technology (Vol. 1); Interscience Publishers, New York, 1966.

Haga, Enoch, Ed.; Automated Educational Systems; The Business Press, Elmhurst, Ill., 1967.

Loughary, John W., Ed., Man-Machine Systems in Education; Harper & Row, New York, 1966

John F. Vinsonhaler, "Improving the Accessibility of Educational Materials;" U.S.O.E. Proj. No. 5-1144, October, 1967.

________________, Technical Manual Basic Indexing and Retrieval System, (BIRS 2.0); Learning Systems Institute, Michigan State University, East Lansing, January, 1968.

☆ U.S. GOVERNMENT PRINTING OFFICE :1969 O - 336-344